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BRAUNSCHWEIG
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EDITORS
Martin Peschken
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In 2020, our Technische Universität Braunschweig looked back proudly, albeit cautiously due to the pandemic, on 275 years of tradition. However, the fact that this tradition is characterized by a look to the future becomes particularly evident in the past 75 years. During this time, the university was able to catch up with international research soon after the Second World War. It has long since become attractive to students from all over the world. This book tells these “incomings” and all those interested about the spirit of innovation that was and is cultivated here – using the example of the Department of Architecture.

The “City of the Future” is one of the four main research areas of Technische Universität Braunschweig, in which the strengths of the various faculties are bundled. In the 75 years since the new beginning in the Federal Republic of Germany, the “Braunschweig School of Architecture” has repeatedly found answers to the question “What does the livable city of tomorrow look like?”, offering not only technological innovations and architectural qualities, but also social visions. It is exciting to see how the now justifiably prominent issues of sustainability, sufficiency or resilience, long before they became terms of general discourse, strike a new tone in these designs of architectural modernism that should become much louder for us to have a future.

We thank the contributors of the Collection of Architecture and Civil Engineering (SAIB) and the Institute for History and Theory of Architecture and the City (GTAS) for the selection and compilation, providing an entertaining insight into the “ABC” of academic architectural research and teaching ‘made in Braunschweig’.

Prof. Dr. Katja Koch
Acting President of Technische
Universität Braunschweig

The book in front of you is quite a special collection of architectural thought and thinking. It captures a substantial period – 1945 to the present day – through a variety of building designs by students of architecture in Braunschweig, Germany.

Conceived in 2015, the larger project that gave rise to this publication initially came to life as the corresponding part to an exhibition which marked the final transition from the old Diploma to the two-tier Bachelor and Master system. Back then, when the ultimate Diploma certificate was awarded at Braunschweig, there was talk of “the end of an era”, as Martin Peschken writes in his preface to the slightly revised and expanded English edition of the original book. Whilst much has changed with this adjustment of systems and procedures, the anticipated rupture is less apparent in the students’ final thesis projects, which are collated in the latter part of the book. Yes, topics and tools through which designs are represented continue to evolve and advance, but we also see a prevailing interest in the formal attributes of spatial production.

What strikes me when looking at the design proposals, is the notable absence of some issues and challenges that we live amidst: the housing question, other large societal concerns or, the climate emergency.

It is down to the careful reflection of the design projects, however, that those perspectives and broader political and economic aspects of architectural culture are not lost. The editorial and curatorial team behind this book transgress the assumed-as-given time-based order of things to expose cross-cutting lines of flight and common interests amongst student projects. Supplemented by a multitude of references and other archival material, the authors who contributed to this rich and manifold set of insights open up a much more varied view onto all things architecture.

What we get with this book, which is now finally also accessible to a broader audience thanks to its translation into English, is this much more faceted, much more messy and much more complicated view on a discipline and field that is so much more than its surface appearance – but all the richer for this, too.

Prof. Dr. Tatjana Schneider
Head of the Institute for History and Theory
of Architecture and the City
Technische Universität Braunschweig

PREFACE

This book compiles some 220 projects with which architects graduated from the Technische Universität Braunschweig between 1948 and 2019. While these works offer a broad panorama of topics and ideas, they represent only a fraction of the total 5003 Diploma theses passed between 1945 and 2015, as well as the several hundred Master's theses since 2013. With this in mind, the title "Braunschweig School of Architecture" sounds quite ambitious. Especially since the usual focus on teacher protagonists in such studies of schools, unjustified as it may be, seems all too much out of focus here. However, I would like to show that our project is much more than a best-of of alumni. The book is based on an exhibition project that my colleagues Arne Herbote, Anikó Merten and Christian v. Wissel realized together with me as the then interim director of the Institute for History and Theory of Architecture and the City in 2015. In that year, the Diploma was finally replaced by Bachelor's and Master's degrees in Braunschweig, which was experienced by some as the end of an era. For us, however, the 70th anniversary (and termination) of the Diploma was more a high-profile event to boost the Collection of Architecture and Civil Engineering (SAIB), which our institute had been building up for seven years. Our curatorial work had begun with an appeal to alumni to provide us with their Diploma and Master's theses, which by default did not remain in the university and were also incompletely documented in the institutes. Many who responded to our call and were indeed still in possession of their theses donated them to the SAIB, where they now form a separate compilation.

The title of the exhibition and catalog was „Findbuch Braunschweiger Schule,“ which implies a double meaning that we wanted to transfer to the English edition by using the indefinite article „an index.“ The word „Findbuch“ means repository, that is, a search tool as used in archives. This tool can guide the search, but you still have to do the research yourself. The meaning of your findings is not simply handed over to you. I will go into more detail in a moment about how exactly this notion captures the program of our project. We have slightly expanded the exhibition catalog from 2015 on the occasion of the English edition, mainly to include student projects from recent years, but there are also a few new entries in the index. This poses the question of why an English edition on such a specialized topic at all? On the one hand, it addresses a growing number of international students for whom the predominantly German-language information about the tradition of their new place of study unfortunately often remains inaccessible. In addition, it provides the opportunity to open up somewhat parochial self-examination in the direction of greater interconnectedness.

These ideas relate not only to the spatial interconnectedness of globalization, but also to the interconnectedness of all of our respective presents with their possible futures. For indeed, today – only six years after the start of the project – it has become ever more evident that we are at an epochal threshold. A threshold

that, in the future, people will somehow have to position either before or after our present. But with climate change, while incalculably drastic increases in inequality and identity conflicts are roiling the political landscape even in the most established democracies, it is increasingly tenable that modernity in its Western, 20-century form is over. Of course, this is a simplification in which many currents and tendencies are somewhat randomly subsumed.

There are implications therefore for questions of form, inasmuch as they have been raised in connection with so-called postmodernism, but really only in a minor way. The major impact is more extensive, concerning the totality of our ways of life, our modes of behavior, our needs even perhaps also our goals and values: the basis on which we imagine and organize our living together, which is also the basis of architecture. The universal claim to growth, equality and freedom has become undeniably overshadowed by the question of survival. And while these aspirations have always been far from reality for most of the earth's inhabitants, they must now be re-examined, redefined for all of mankind, probably for better and for worse.

None of these challenges is really new, and this is also reflected in the projects shown here. For of course both the choice of assignments and the responses of the candidates reflect the general contemporary events as well as the regional and global trends and discourses within the field of architecture. And these seventy-five years have certainly been eventful ones in Germany, marked by socio-political changes and a simultaneously networking and pluralizing architectural scene that reacts sometimes at a varying pace to these transformations. So, if a Braunschweig school is to be considered as a phenomenon of late modernism, we can also already trace approaches and issues that signal a new epoch, that are becoming increasingly prominent. Thus, our index „Findbuch Braunschweiger Schule“ remains an invitation to discover and rediscover, but also an encouragement to dare to look forward while looking over the past, to compare, to find parallels and differences. It is an invitation to enter into conversation about all of this, to let a Braunschweig school become a provisional reality, repeatedly, as a means of discourse.

If one focuses mainly on the final theses, essential aspects of teaching in Braunschweig fall by the wayside, that much is clear: above all, in respect of the work of those chairs who have issued few or no theses, although this is already changing significantly since the introduction of the Bachelor's and Master's degree programs. These include some of the subject areas that deal with construction technology, building services engineering, theory and history, and architecture-related art. Nevertheless, graduates know that professors such as Berthold Burkhardt, Elisabeth Endres, Peter Färber, Manfred Norbert Fisch, Berthold Gockell, Norman Hack, Kristiana Hartmann, Konrad Hecht, Justus Herrenberger, Alexander v. Kienlin, Folke Köbberling, Azade Köker, Klaus Pieper, Heinrich Röcke, Tomás Saraceno, Tatjana Schneider, Harmen Thies, Daniel Thulesius, Jürgen Weber, Karin Wilhelm and others have shaped the studies at the Braunschweig School of Architecture just as much as the design professors represented here almost without exception for their supervision of the final theses [→CURRICULUM]. Unfortunately, the assistant

professors, who in most cases supervised the projects much more intensively and usually also more personally than the professors, are not mentioned at all. The German university system is structured in such a way that their assistance in constructive criticism is much less prominent and not documented consistently. We have to trust that at least the graduates, however, know exactly who influenced them and what form this influence took.

BRAUNSCHWEIG SCHOOL OF ARCHITECTURE

Indexes are search aids for obtaining an overview in archives. As lists of keywords relating to content, document types or timelines, they cut through the inherent messiness of things, thereby thinning out the thicket of documents accumulated in the archive and showing the user paths to access the memory stored within them. However, these paths have to be taken up by the users themselves and “meaning” must yet be construed from the flood of information. In this sense, the keywords of the index are signposts for this pathfinding, lynchpins for attaching various threads, starting points for comparison, for differentiations.

Our index is therefore the opposite of the “myth of the Braunschweig School”, and it places the epithet in quotation marks with reservation, if not irony. It goes without saying that the paradigms in architecture as well as the structure of teaching are not the same in 1950 as they are in 1980, 2000 or 2020. Thus, our index project is also about not letting the concept of the Braunschweig School ossify as branding, but to understand it discursively and open it up to the future. The difficulties of filling this epithet with content in a reasonably precise way have already been written about in detail.¹

Two sources can be identified in the genesis of the term, both dating back to the first half of the 1950s. As Justus Herrenberger recalled,² the epithet emerged on the German architectural scene when professors (only men at the time) and even students of the TH Braunschweig were able to win competitive tenders with striking frequency. Accordingly, the term would originally be a designation from the outside, half appreciative, half enviously disrespectful. It can be assumed that this attribution not only meant a group of people, but also a recognizable “Braunschweig” signature, which at that time was successful with those who assessed it. Kristiana Hartmann has described this characteristic in retrospect as an “undogmatic functionalism,” as a particular expression of a “reduced and matter-of-fact aesthetic” influenced by the International Style, “but with which emotional, social, and humanitarian motifs were also associated.”³

Karin Wilhelm found the first written source for the term in a letter from the architecture student council to Friedrich Wilhelm Kraemer, Professor of Building Theory and Building Design, dated March 1954. The letter was intended to persuade Kraemer, who had just received an appointment at the Technische Universität Berlin, to stay in Braunschweig. Under his “leadership, an intellectual community had been formed that has become a household name in the German professional world under the title ‘Braunschweiger Schule’”. Thus, we have a self-description from

within the circles of the university, possibly as a reinterpretation and revaluation of the epithet that was already floating around on the scene. It should be noted, however, that it was now no longer a matter of “style” but of an “intellectual community”, i.e. explicitly of an attitude.⁴

Dieter Oesterlen, professor of Building Theory and Design from 1952 to 1976, states in retrospect that neither he nor F. W. Kraemer ever used the term Braunschweig School. Nevertheless, he adds the comment that “the period after the war and the one that followed was full of intensity and springtime expectation and therefore perhaps more suitable than the present” to speak of the emergence of a school. He wrote this in 1987. So: was there a concept and program of a Braunschweig school?: probably not. Was there agreement on the organization of teaching?: evidently so. According to Oesterlen, this combined precisely commitment to different design attitudes and personalities with simultaneous collegial cohesion. This cohesion was lived and reproduced in customs of study, such as the obligatory →MELDEAUSSTELLUNG (portfolio exhibition) or the agreement that at least one of the “mandatory designs had to be detailed in terms of construction technology or building services.”⁵

One can say that in the external identification of the “Braunschweig School” the implication of a formal recognizability predominates,⁶ while in self-determination formal identifications are rejected and commonalities are seen at all only in the attitude or the influence of certain personalities and their teachings.

The most prominent external attribution of the term was penned by Ulrich Conrads, who in 1961 thought “that quite silently something like a ‘Braunschweig School’ was taking shape.” The cautious formulation obviously takes pains not to affix a label that would direct the perception of the examples he presents. Although he admits that “at first glance it may seem” as if the Braunschweig students were “all ‘little Kraemers’”, on closer inspection they proved to be individualists “who do not use architectural striped socks to distinguish themselves, but solely their own heads, a hefty dose of self-criticism, and a reliable architect’s craft.”⁷ This craft certainly refers to the special know-how in the technical-constructive subjects. Indeed, these have had a particularly high status in the department’s education since the time of the Weimar Republic, when Carl Mühlenpfordt had advocated a reform of the curriculum (→ANTECEDENT). Kraemer had studied with Mühlenpfordt and later worked as his assistant. But where did the self-criticism and the use of one’s own head come from, which Ulrich Conrads mentions as characteristics of the Braunschweig students?⁸

One possible answer can be found in the so-called “Freitags-Andachten” (Friday devotions) Kraemer’s weekly lectures that were followed attentively throughout the department. The “spiritus rector” of the Braunschweig School of Architecture (Conrads) knew how to surround himself with a special aura that certainly gave his lecture the appropriate weight.⁹ The lectures were laid out as a tour d’horizon and as a school of vision.¹⁰ His aim, Kraemer writes retrospectively from 1988, was to present the elements of building design in their historical manifestations, in order to understand contemporary architecture – e.g. works by Gropius, Jacobsen and

Mies to Saarinen, Aalto and Le Corbusier – as embodiments of or deviations from “the laws of a higher order that prevail here”.¹¹ For the formation of a consistent architectural theory, Kraemer’s unconditional attempt to think humanist tradition and modernism together is not without problem, though it is quite typical of the intellectual culture of the early Federal Republic of Germany. However, his main concern in the “Devotions” is to maintain the image of the architect as a generalist, and in this he does not think first of his competence as a practicing architect, but of a comprehensively educated personality.¹² In an almost Goethean manner, he describes how his lecture was about acquiring an attitude toward and through design, rather than a particular design method: “We learned from them (the examples of the past, MP) the immanent laws of form and its assembly (*Gestalt und ihre Fügung*) and were delighted to no longer have to merely perceive the effect of historical architecture in amazement, but to understand and be able to deduce it, and to use this understanding for our own designs.”¹³ Ulrich Conrads assumed that anyone who had been trained in this way to look at the trends of contemporary architecture would also have been equipped with “a hefty dose of self-criticism”, necessary for a successful professional life.

Interestingly, two decades later, Braunschweig professors would paint a very different picture of the attitude they would consider appropriate for a professional architect. In the so-called (and misspelled) “Charter of Braun-Schweig”, published in the fourth issue of 1972 of *Das Werk*, and the board’s only attempt to publicly launch such a program, it says: “The duty of the architect is the structural realization of requirements for use, which are formulated in the building program by society or by individuals as clients. [translation my own]” This is only the first of a series of claims with which the Braunschweigers sought to codify the professional profile of architects, reducing it to a presumptuous “hard core” of skills and thus willfully ignoring the then-current discourses on the social character of doing architecture. The paper immediately earned the signatories “criticism and polemical jibes” in professional circles.¹⁴ In fact, the somewhat defiantly and narrow-mindedly formulated text reflects the Braunschweig professors’ stance in a conflict (→TENSION) they were having with students and a section of their staff. But in its pragmatic self-restraint the “Charter” can certainly be read as a swan song to the spirit of the generalist outlined earlier. Perhaps this is not surprising at all, but rather the process of self-establishment which affects every generation, reinforced by historical development. After all, had one not arrived in a different reality than that which one had imagined? From the aspirations for a catch-up in civility and culture amidst the nation-in-ruins to an architectural practice in the aftermath of the Wirtschaftswunder economic miracle: a pragmatism that also has to do with increasing internationalization and the corresponding competitive pressure.

Ten years after the charter had been published, Walter Henn, the last of the men whose names are associated with the Braunschweig School of the post-war period,¹⁵ is made emeritus: in addition to the three mentioned so far, these include Manfred Lehmbruck and Zdenko Strižić, whose work is currently being

reappraised.¹⁶ In 1974, Meinhard von Gerkan was appointed as Kraemer’s successor and, like the latter, he was widely perceived as the department’s most representative figure. Von Gerkan himself speaks of the encounters and traditions that influenced him as a student in Braunschweig and how he carried them on as a teacher.¹⁷ And yet, in keeping with the general differentiation of subjects, his generation of professors, who shaped teaching in Braunschweig well beyond the end of the 1990s, has become so diverse in their topics and attitudes that it is increasingly difficult to outline a picture of the Braunschweig School.

Since then, as Olaf Gisbertz has pointed out, the Braunschweig School can only be spoken of as a “brand and myth,”¹⁸ i.e., as a strategic instrument and as an offer for identification that cannot be defined with scientific precision. However, this is the same as with all group identifications. Somehow a center of gravity is there without being pinned down, and the edges are fluid. In fact, this identification with the Braunschweig architecture department exists to a fairly high degree, but in a different way than in the usual narratives. It can be found in all generations: for example, as a bond between the students of one →CLASS or drawing studio (→ZEICHENSAAL). There are the shared experiences of being inspired, counselled, assessed, encouraged by the same teachers. There are parents who send their children to their “alma mater” whenever possible. Quite a few professional (as well as personal) partnerships grew out of co-working in the drawing studios; and many offices founded by alumni prefer to recruit interns and employees from their old college. There is much to be said for considering these experiences of community as the core of a “Braunschweig School of Architecture.”

While it seems true then that one can speak of the Braunschweig School only at the price of the myth, it is a myth that must and should be worked on. It makes no sense to discard the epithet just because it cannot be exactly defined in a plausible way. But it certainly makes no sense to invest a great deal of energy in constructing a tradition, in distilling the complexities, contradictions, and fractures in order to simply create a brand. Instead, the term should be understood as a calling. A calling to do emphatically what every school must do if it wants to remain open to the challenges of the present and the future: to constantly renew itself.

HOW THE BOOK IS ORGANIZED

The index structure of the book goes back to the curatorial concept of the 2015 exhibition. At that time, we endeavored to organize the sheer abundance of assignments, design proposals, also ultimately the materiality and technical ideas, to represent those designs in a way that is manageable for visitors and would also provide for an exciting spatial experience when roaming through the exhibition. For this reason, we disliked the idea of presenting the exhibits in a progressive manner, decade for decade, differentiating typologies, construction tasks, or formal approaches. After all, it is only in intertwining these aspects that the complex field of expertise discovered by the architects-to-be during their studies is revealed. And though a chronological progression may be the most objective arrangement, we found it somewhat mun-

dane and pedantic. We felt that this would be a wasted opportunity, and ignoring something characteristic to the medium exhibition: namely, to employ spatial juxtapositions in order to let the exhibits of different temporal and probably also mental spheres enter into a dialogue with each other. A chronological (Braunschweig) “history of architecture” can nevertheless be found at the end of the book.

The index principle from A to Z, gave us the liberty to include all aspects that we deemed essential. The alphabetical index is neutral, but its 38 keywords are not. They are heuristic, having gained plausibility through continuous inspection of the material and in countless discussions within the curatorial team. The keywords of the Index can be assigned to four different “perspectives” that the curatorial gaze takes. First, there are the building types that are typical for the final design assignments at TH/TU Braunschweig, some of them only for a certain era, others remain a staple over the entire seven decades, such as →AUTOMOBILE, →FLUGHAFEN (airport), or →HEARTH. Secondly, archetypal design ideas recur during the search for solutions to a wide variety of tasks, such as →BELT or →Q-BE or →STRUCTURE. The third curatorial gaze focuses on the use of design techniques: →LAB COAT, →VACUUM, →USE, →X^N. And finally, we take a look at the conditions and the “culture” of study in Braunschweig: from the →CURRICULUM to the →MELDEAUSSTELLUNG (portfolio exhibition) to the →ZEICHENSAAL (drawing studio). In the synopsis of works from different eras, we thus simultaneously drill diachronically and at will into the depths.

When we assign a work to a particular keyword, we do not believe that we have thereby captured its central feature. Our curatorial gaze on this sheet or that model is a “seeing-as” in the Wittgensteinian sense, that is, alternative views are emphatically included. For this reason, numerous works are also shown under different headings. As can be read from them, the character of these keywords is not scientifically strict, but should be understood as an invitation to engage in our “seeing-as”, or to reject it as well and to find alternatives. Behind such interpretations, the contours of an archive are emerging that will become clearer in the future, whether in individual investigations or in the collection of even older and future theses as part of the SAIB, the Collection of Architecture and Civil Engineering at the TU Braunschweig.

ACKNOWLEDGMENTS

The English edition of the Index was made possible by the support of the International House of the TU Braunschweig. We would like to thank Heinrich Schwabecher and especially Andreas Hebbelmann. Melissa Maldonado is to be thanked for the translation from our unwieldy German and for her patient editorial support, and Simon Schindele for the wonderful design of the book, which maintains diversity while preventing fatigue. The collaboration with Oeding Print was, as always, professional and very pleasant. Without the help of Caroline Reichardt, who typeset and designed the beautiful original German catalog, the reconstruction of the image files would hardly have been possible.

However, the book goes back to the exhibition project of 2015. Even if not all of them can be named, many minds were involved in its realization, who should be

acknowledged here once again. In particular, the then Dean of Studies Gabriele G. Kiefer as well as Ina Müller, Managing Director of the Faculty of Architecture, Civil Engineering and Environmental Sciences, both of whom had worked hard to secure the basic funding for the project. In the winter semester 2014/15, the Braunschweig School had itself become the subject of teaching. Students helped prepare the curatorial work. Almut Grüntuch-Ernst, who heads the Institute for Design and Architectural Strategies (IDAS), selected the exhibition project for several design assignments. Under the guidance of assistant professor Inés Aubert, students had further developed the scenography and finally realized it in collaboration with “Stiftung Freizeit” (Inés Aubert, Ruben Jódar).

I would also like to make special mention of Tatjana Schneider, who as the new head of the Institute GTAS enabled and supported the work on the English edition, and Karin Wilhelm, who had accompanied the exhibition project from afar with advice and support.

Martin Peschken

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| <p>1 Böttcher, Roland/Hartmann, Kristiana/Lemke-Kokkelink, Monika: Die Architekturlehrer der TU Braunschweig 1814–1995 (The Architecture Teachers of TU Braunschweig), Braunschweig 1995; Wilhelm, Karin/Gisbertz, Olaf/Jessen-Klingenberg, Detlef/Schmedding, Anne (ed.): Gesetz und Freiheit. Der Architekt Friedrich Wilhelm Kraemer (1907–1990) (Law and Liberty. The Architect Friedrich Wilhelm Kraemer (1907–1990), Berlin 2007; Paulus, Simon/Knufinke, Ulrich: Braunschweig vor der „Braunschweiger Schule“. Bemerkungen zur Selbstfindung einer Architekturschule (Braunschweig Before the „Braunschweig School“. Remarks on the Identification Process of an Architecture School), in: Philipp, Klaus-Jan/Renz, Kerstin (ed.): Architekturschulen. Programm, Programmatik, Propaganda (Architecture Schools. Program, Objectives, Propaganda), Tübingen 2012, pgs. 145–157; Gisbertz, Olaf: Marke und Mythos – „Braunschweiger Schule“ (Brand and Myth – „Braunschweig School“), in: Philipp/Renz (ed.): Architekturschulen, l.c., pgs. 159–171.</p> | <p>2 Justus Herrenberger in conversation with Anne Schmedding, recorded in 2006, SAIB. Herrenberger had graduated from the TH in 1947 with a study on the reconstruction of Braunschweig’s Hagenmarkt, which had been evaluated by F.W. Kraemer and J. Göderitz, and had functioned as professor of building construction at this university from 1959 to 1985.</p> <p>3 Hartmann in her introduction to Böttcher/Hartmann/Lemke-Kokkelink, l.c., p. XIV, [translation my own].</p> <p>4 Cited in Wilhelm, Karin: Gesetz und Freiheit, in: id. et al.: Gesetz und Freiheit, l.c., pgs. 14–23, here p. 18, [translation my own].</p> <p>5 Oesterlen in a letter to Roland Ostertag, dated 24.2.1987. Cited in: Böttcher/Hartmann/Lemke-Kokkelink, l.c., pgs XIV–XVI, [translation my own].</p> <p>6 Cf. Paulus/Knufinke, l.c., p. 145. This is also expressed in buzzwords such as the „Braunschweiger Riegel“ (Braunschweig bar or bolt).</p> |
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- 7 Conrads, Ulrich: Lehrstühle und Leerstühle. Eine Randnotiz zu den Bauten in diesem Heft und zu einigem anderen mehr (Chairs and Empty Chairs. A side note on the structures shown in this issue and some other issues), in: *Bauwelt*, Vol. 52, 1961, No. 11, p. 305.
- 8 Cf. Paulus/Knufinke and Gisbertz, l.c.
- 9 As recalled by Meinhard von Gerkan in id.: *Erinnerungen*, in: Wilhelm, Karin et al.: *Gesetz und Freiheit*, l.c., pgs. 111–113.
- 10 Cf. Fendt, Martina: *Architektur und Musik*; Schmedding, Anne: *Lehre in Braunschweig*. Both texts in: Wilhelm, Karin et al.: *Gesetz und Freiheit*, l.c., pgs. 65–73 and 102–110 respectively.
- 11 Friedrich Wilhelm Kraemer in a letter to Berthold Burkhardt on 2.2.1988. Published as „Die Braunschweiger Schule und mein Teil an ihr“, in: Böttger/Hartmann/Lemke-Kokkelink: *Die Architekturlehrer der TU Braunschweig*, l.c., pgs. XVI–XVII, [translation my own].
- 12 Cf. Wilhelm, Karin: *Gesetz und Freiheit*, l.c.
- 13 As cited in Böttger/Hartmann/Lemke-Kokkelink: *Die Architekturlehrer der TU Braunschweig*, l.c., p. XVII, [translation my own].
- 14 Gisbertz: *Marke und Mythos*, l.c., p. 168, [translation my own].
- 15 C.f. Paulus/Knufinke, 2012, p. 157. In the quest for a Braunschweig school of architecture, the authors include periods for which the term has not been handed down. Accordingly, one could just as well speak of a first Braunschweig school in times of the German Empire (with Constantin Uhde as the most prominent architect) and of a second school during the Weimar Republic (starring Carl Mühlenpfordt), which preceded the third „Braunschweig school of the post-war period“.
- 16 Cf. Sebastian Wagner: *Manfred Lehmbruck – Ein Architekt der Moderne*, 2006, <https://doi.org/10.25643/bauhaus-universitaet.739>. Knufinke, Ulrich: *Architekt, Fotograf und Kosmopolit: Zdenko von Strizic und das Institutsgebäude für Stahlbau und Statik (Strižić and the building for the institute for steel construction and statics)*, in: id./Funke, Norbert H. (eds.): *ACHTUNG modern!*, *Architektur zwischen 1960 und 1980: 14 Erkundungen im Braunschweiger Land*, Petersberg 2017, pgs. 138–143. – Part of Strižić's bequests are preserved at the SAIB in Braunschweig, while the larger portion is kept by the Faculty of Architecture in Zagreb, where Branimir Rajčić is currently conducting a research project on the architect's legacy.
- 17 Cf. Meinhard von Gerkan, l.c.
- 18 Cf. Gisbertz, l.c, [translation my own].

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 GLOBAL
 GRID
 HEARTH
 HORIZON
 INDUSTRY
 JAUNT
 KURVE
 LAB COAT
 MASTER
 MEGA
 MELDEAUSSTELLUNG
 NUSSBERG
 OKER
 OLYMPIA
 OVERSPILL TOWN
 Q-BE
 QUANTITY
 RIEGEL
 SCHOOL
 STRUCTURE
 TENSION
 USE
 VACUUM
 WATERBANK
 X^N
 Y-CHROMOSOME
 ZEICHENSAAL

ANTECEDENT

- 1 Drawing studio of the architecture department, Technische Hochschule Braunschweig, 1931. On the wall a caricature of Carl Mühlenpfordt, professor for design and building science from 1914–1934.
- 2 Applicants for a place at university in front of the main building of the Technische Hochschule Braunschweig, summer 1946. An internship of several weeks in the removal of rubble as well as in construction work on the university buildings was a prerequisite for the commencement of studies.

1945 was also no “Stunde Null” (“Hour Zero”) for the Braunschweig architecture department. There were personnel and structural continuities, just as in all areas of public and private life in Germany, which also did not begin anew all at once after the military and political collapse of the Nazi German Empire.

Still, the significance of this turning point for architectural education can not be overestimated. Because now is the point when the ideological, political and financial conditions for getting acquainted with the paragons of contemporary architecture for (re-)constructing Germany were established for a segment of students with all their senses attuned to excursions and, in part, personal encounters with the protagonists of the age [→DEPARTURE]. Friedrich Wilhelm Kraemer, who had been the head of the architecture department since 1951, also managed to use the restaffing of professors to untangle the previous accumulation and mix of subjects and create a clear distinction for tasks and responsibilities.

However, the trailblazer of the Braunschweig curriculum in the post war era was Carl Mühlenpfordt. From 1919 until his dismissal forced by the Nazis, Mühlenpfordt held senior positions at the university. In the twenties, he developed ideas for the reform of architectural education. Designs were to be more strongly based on construction, material, and typology studies and indeed

1



with a thorough look at the history of architecture. The intention of Mühlenpfordt’s reform was to counter the development of the architecture department in the 19th century, whose result was a formalistic and historically-dominated design doctrine which was able to assert itself in Braunschweig up until the time of the Weimar Republic.

A history of institutional architectural education in Braunschweig must glimpse back at least until 1790 when Johann Carl Kahnt established an “architectural drawing institute” here. After the German Campaign of 1813, when the Collegium Carolinum was reopened, Kahnt, the virtual forefather of today’s TU, was appointed as a lecturer in the area of technical sciences.

Design training reached a high point at the Collegium in the late years of classicism when Carl Theodor Ottmer, architect of the Braunschweig residence palace, taught here from 1841 to 1843. The design for the new building of the polytechnic university completed in 1877, currently the main TU building at Universitätsplatz, was created by Constantin Uhde, “Professor of Architecture, Ancient Architecture, the Middle Ages, and the Renaissance” between 1871 and 1901.

Comprehensive reforms during the 1860s and 1870s ultimately led to teaching plans, which reflected the division of labor



of modern society and the specialization of civil engineers and architects. Architectural design doctrine since then has primarily been concentrated on the analysis of and composition with historical building styles. Mühlenpfordt's suggestions for reforming this situation are a testament to how anachronistically the style design doctrine was also perceived by architects like him whose structures were definitely not characterized by the Avant Garde but rather characterized considerably by regionalism and tradition.

At the start of the Nazi era, which had already begun before 1933 in Braunschweig, there is the "Braunschweig Academy conflict". It can be traced back to actions by Minister of the Interior and National Education and later Minister President of the Federal State of Braunschweig, Dietrich Klagges. Klagges had ambitions to turn the region of Braunschweig-Wolfsburg-Salzgitter into a central research and industrial site of the empire. Back in 1931, he had already wanted to naturalize Adolf Hitler in the German Empire by creating a "professorship for organic social science and politics" for him at the then Technische Hochschule. Though Klagges' scheme failed, he had intervened so extensively into Braunschweig higher education politics that he sparked numerous confrontations with the rector at the time, Carl Mühlenpfordt. In 1934, Mühlenpfordt, along with many other professors who were unpopular with the regime, be it for political or 'racial' reasons, were finally dismissed.

The most influential figure from the department in the Nazi era was Emil Herzig. As an architect, Herzig was successful with

settlements in the Heimatschutz style. He even produced the design of the building where the Braunschweig House of Science is currently located. From 1936 to 1943, he was the rector of the Technische Hochschule. From 1944, he functioned as the dean of the faculty of architecture. In 1945, Herzig was dismissed for political reasons. However, he returned to the university in 1953 with the status "professor for reutilization". Professors Hermann Flesche (architectural history, art history and city planning) and Johann Daniel Thulesius (architectural drawing and interior design) remained in their positions from 1923 resp. 1919 throughout the political upheavals until well into the 1950s.

Following the reopening of the Technische Hochschule in November 1945, three chairs would soon be newly appointed: Johannes Göderitz for city planning, and in the following year Kurt Edzard for modelling and Friedrich Wilhelm Kraemer for building theory and structural engineering. Kraemer completed his Diploma in 1929 at the TH Braunschweig and worked as an assistant in Carl Mühlenpfordt's department in the early thirties.

The Braunschweig architectural education from the post-war era up until the 1950s must be viewed against this backdrop of different generations of professors working in parallel and together, whose positions on Nazi policy and design ideology ranged from confrontational (Göderitz 1933) to varying degrees of complicity.

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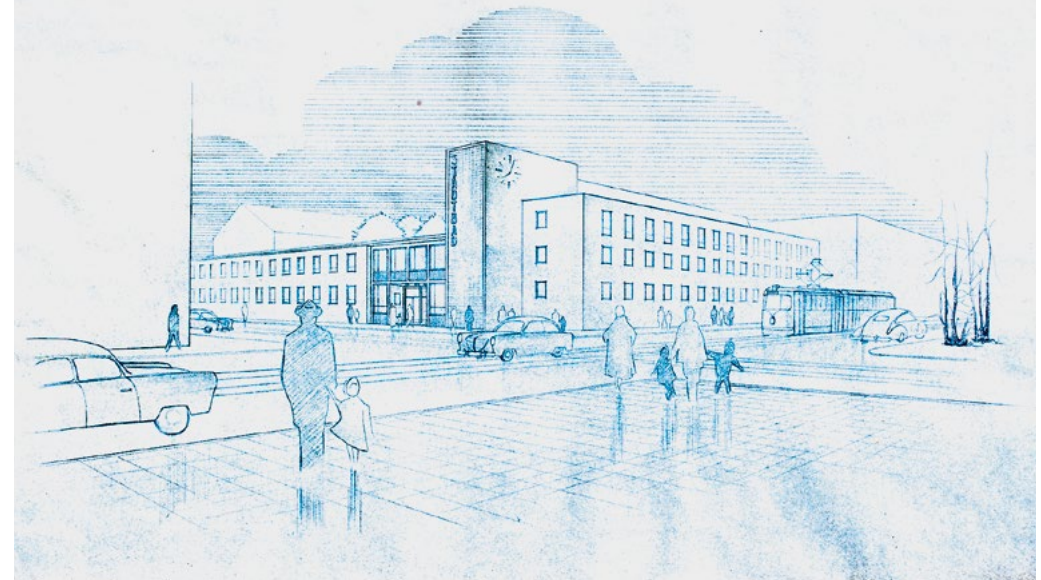
AUTOMOBILE

- 1 Bruno Jalaß, Stadtbath (municipal bath) Mitte in Frankfurt am Main, 1953, Prof. Kraemer, perspective view
- 2 Meinhard von Gerkan, Fluggast-Abfertigungsgebäude (passenger terminal building) in Hannover-Langenhagen, 1964, Prof. Oesterlen, model
- 3 Walter Fleck, Design of a Variable Motel-Type for the German Motorway, 1954, Prof. Kraemer, lodgings
- 4 Cord Heinrich Bahlburg, Bremen-Oslebshausen. Proposal for the Extension of an Urban Development Axis, 1972, Prof. Bruckmann, emissions control plan
- 5 Wilfried Dechau, Training Center Rhode, 1973, Prof. Kraemer, entrance hall, section (detail)
- 6 Wolf Geipel, Film and Television Academy Hamburg, 1972, Prof. Lehmbruck, ground floor

20th century history is closely interwoven with the history of the automobile. This is manifested in car-friendly and car-inspired architecture and city planning, which is also visible in the designs of the architecture department in many ways.

A number of final theses, especially from the 1950s, indicate a fascination with the automobile: Hans Ehlers (1950), Bruno Jalaß (1953), and Ulrich Hausmann (1958) hint, sometimes with irony spilling from their quill, at how the promise of the motorized Wirtschaftswunder years found its way into architectural design [→DEPARTURE].

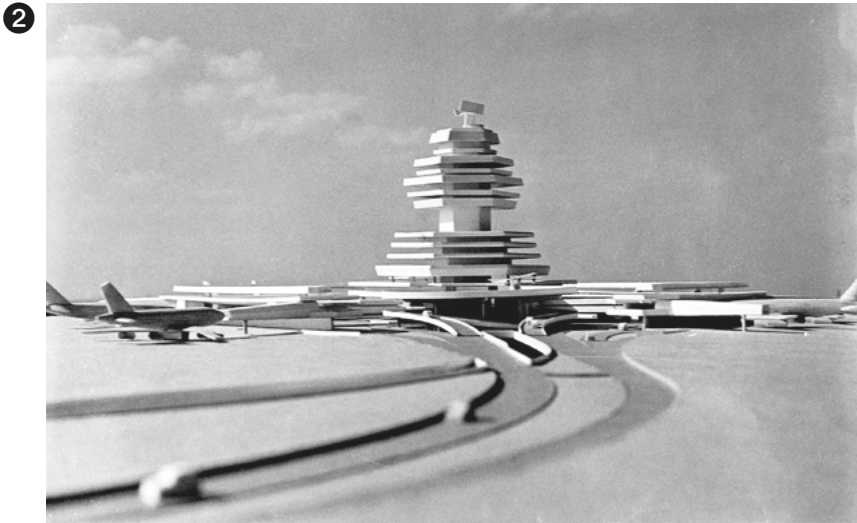
A sign of the blending between the German and American dreams of automobility is found in Walter Fleck's *Design of a Variable Motel-Type for the German Motorway* of 1954. Parking and sleeping areas merge into an architectural unit with a maximum of one flight of stairs between car and bed. The same line of thought can be traced in Meinhard von Gerkan's *Passenger Terminal in Hannover-Langenhagen* from 1964. The author tests here for the first time the concept propagated by Lufthansa for "drive-in airports", which shortly thereafter was successfully further developed in a competition for Berlin-Tegel. Already in his Diploma design, von Gerkan relocates access and parking spaces into the interior of the complex near the boarding gates [→FLUGHAFEN].



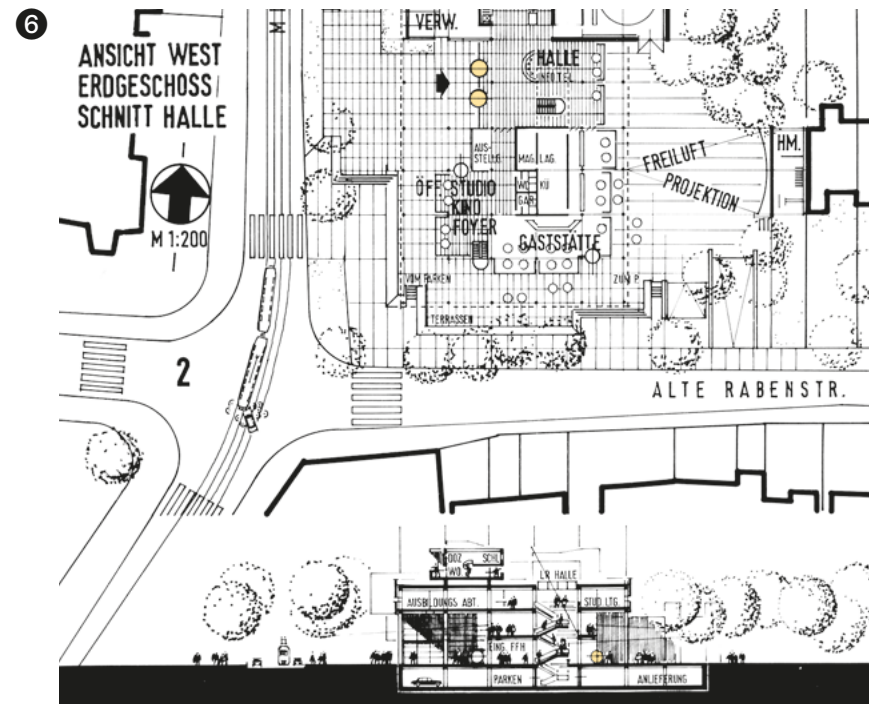
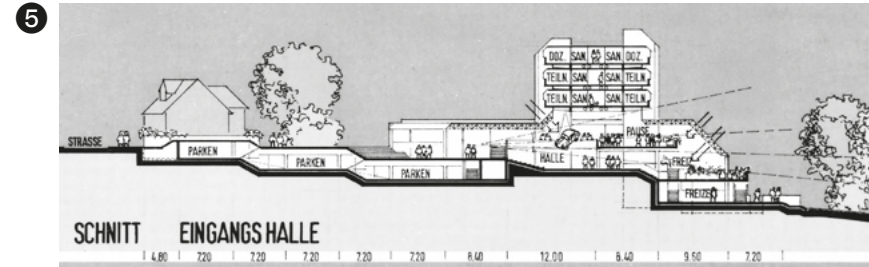
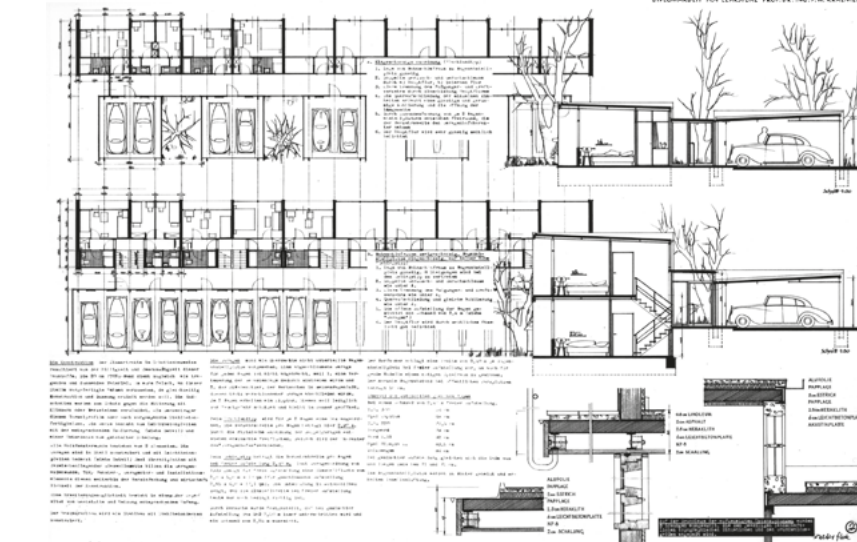
Traffic became the focal object in urban planning in the sixties and seventies. Ernst-Detlef Kohl's analysis of connectivity options (1965) and even more so Cord Heinrich Bahlburg's emissions control plan from 1972 do not merely state the massive increase in motorization in western Germany but rather delineate the resulting lines of conflict.

The car makes a dramatic appearance in the works of Wolf Geipel (1972) and Rolf Toyka (1978) – thus demonstrating the Braunschweig students' sense of humor. Instead of any ideology in favor of or against the car [→EUTOPOS], the authors show us what always comes with it: accidents. Geipel's final plan for the new *Film and Television Academy Hamburg* depicts the exact moment when a vehicle is struck by one of the Hanseatic city's last trams. While Toyka explains his design for a Goethe Institute in Stuttgart to his examiners, two cars that crashed in front of the Institute's parking garage are being recovered from the scene of the accident and quietly towed away towards the edge of the plan.

In the 1973 designs for a *Training Center* in Rhode, the influence of Europe's largest car factory finally makes itself known. One year before the production of the VW Beetle is finished, Wilfried Dechau already declares it a work of art. Gylfi Guðjónsson, on the other hand, references the economical heart of the region with his



2 VARIABLER MOTEL-TYP FÜR DIE DEUTSCHEN AUTOBAHNEN
DIPLOMARBEIT VON LEHENDIHL PROF. DR.-ING. F.W. KRAEMER



north arrow formed from a V and a W while the building type itself anticipates the imminent structural transformation [→INDUSTRY]. Overall there is no shortage of parking facilities and garages in the 75 years of Diploma, Bachelor's and Master's works. However, since the appointment of Folke Köbberling to the chair for architecture-related art in 2017, such bids for a motorized mobility society are increasingly being questioned on the part of teaching staff.

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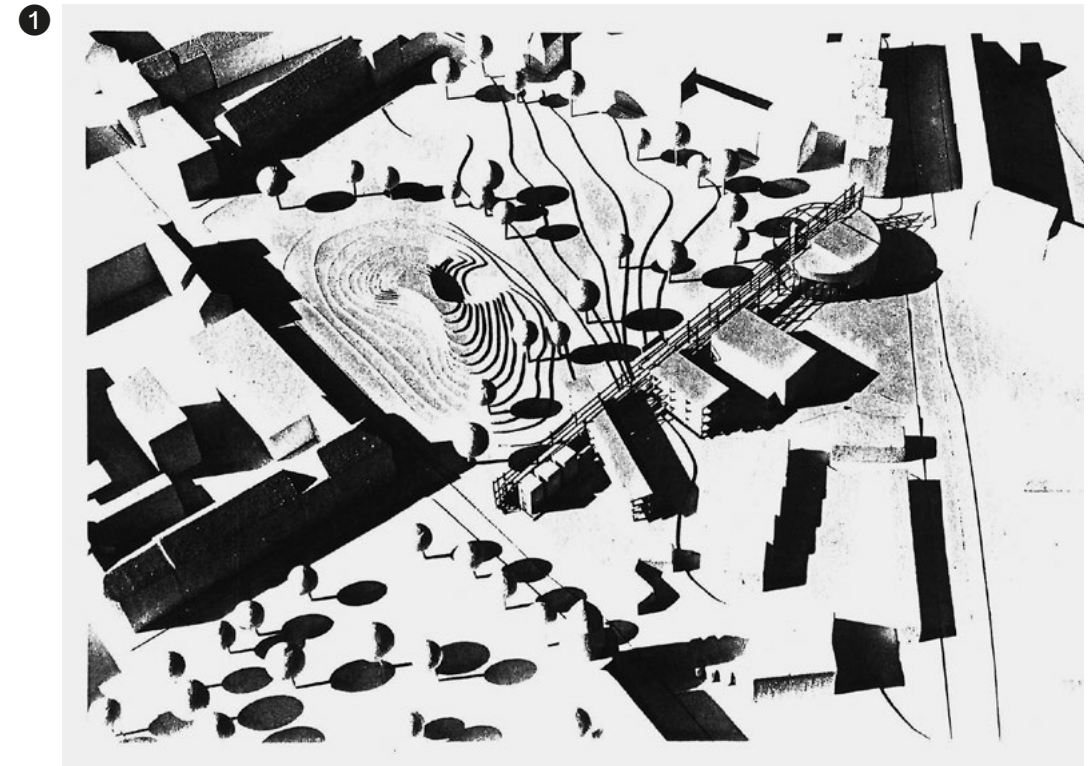
BELT

- 1 Thomas Reglitzki, Academy for Film and Television in Cologne, 1988, Prof. Wagner, model
- 2 Simon Paulus, Kulturforum Graz, 1999, Prof. Szyszkowitz, floor plans, sections and elevation
- 3 Carolin Kleist, Gedenkstätte Berliner Mauer (Berlin Wall Memorial), 2008, Prof. Kiefer, succession of artistic encounters (detail with specifications regarding material)

The architecture department designs from the past 80 years are as diverse as can be expected from the number of graduates and the areas of focus. However, an attempt is made here to single out the composition principle of the belt and trace it by way of example through the ages and through a plethora of interpretations.

Generally speaking, the belt can be interpreted as an organizing principle directed towards the urban development perspective. This is how Jonathan Schuster quite consciously staged his Paris Fashion Academy 2014 as a unifying succession of buildings and squares similar to a *passerelle urbaine*. In Silke Lubahn's *Waterfront Living* from 2004, the belt conforms as a linear park beneath the strips of the planned development, and functions both as a backbone of urban expansion as well as a bridge to the existing settlement structure of Rotterdam.

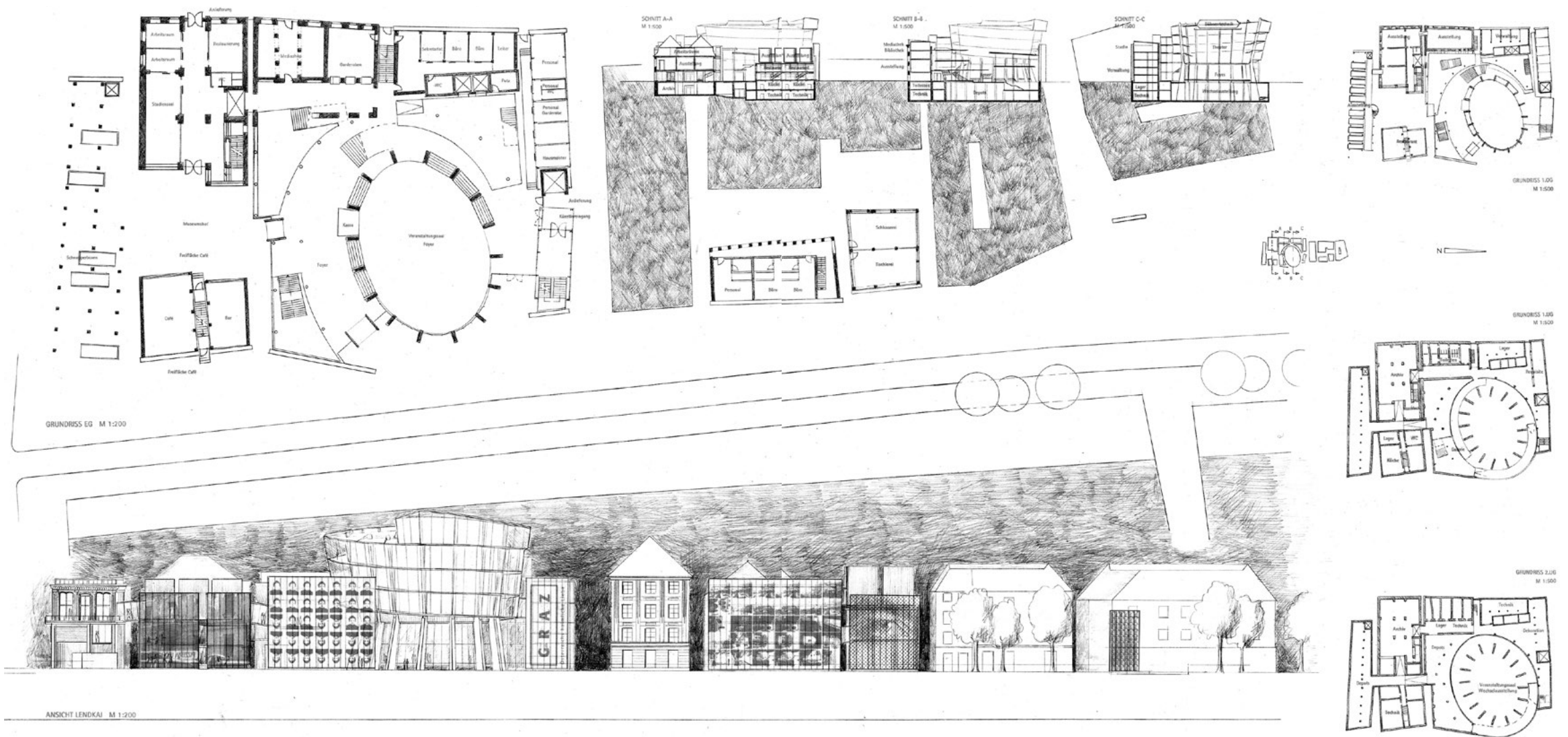
A second working thesis formulates the conjecture that belt-like design approaches are to be attributed to an attempt to surmount the contrast between free form and order in the composition. For his *Academy for Film and Television in Cologne*, in 1988 Thomas Reglitzki breaks down the various functions of the school in individual fundamental forms [→Q-BE, KURVE] whose cohesion is nevertheless retained thanks to a unifying framework structure. For her *Berlin Wall Memorial* at the chair for landscape



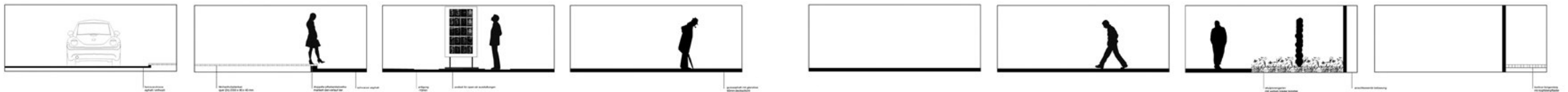
architecture, Carolin Kleist reinforces the experience of the “historical scar” by framing the void of the border strip as a park belt while simultaneously overcoming it through “thematic brackets” (Kleist). As such, various functions, glimpses, structures become one unit as their succession is merged in space.

As a compositional framework, the belt particularly attempts to conceive of architecture and the city from within the movement. Space and structures are not (only) perceived as elements, but also in their specific rhythm [→JAUNT]. This is how Simon Paulus develops the *Kulturforum Graz* in 1999 as a sequence of urban scapes along the river Mur. His plan diagram represents the close relationship between movement in space and the media facade by superimposing river ground plans and building views [→USE]. Stefanie Küchenmeister, on the other hand, places the path itself at the heart of her design. Her *Grothe Museum for Contemporary Art Collection* (1993) consists of two “linear image tracks”, which encompass a “moving jetty” in order to intermesh the exterior and interior (Küchenmeister).

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3



BLOCK

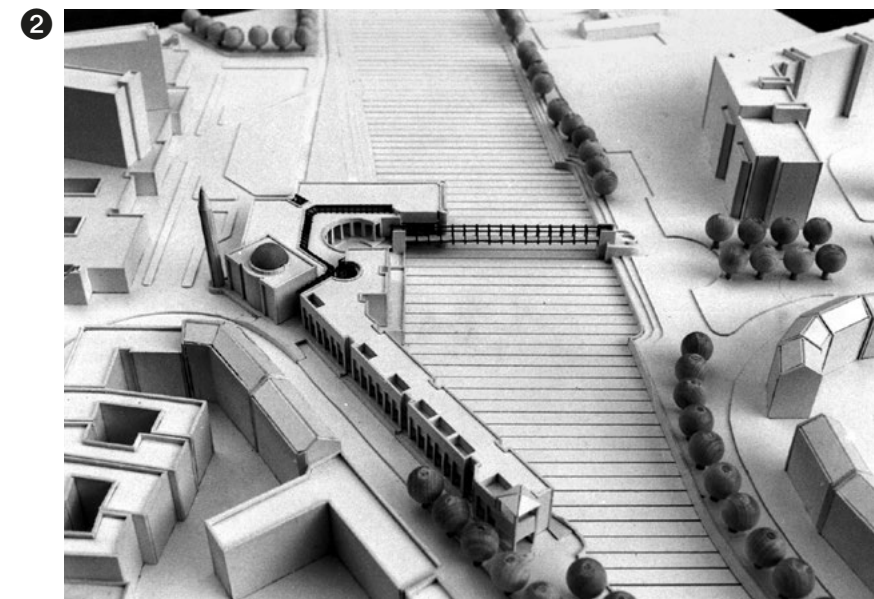
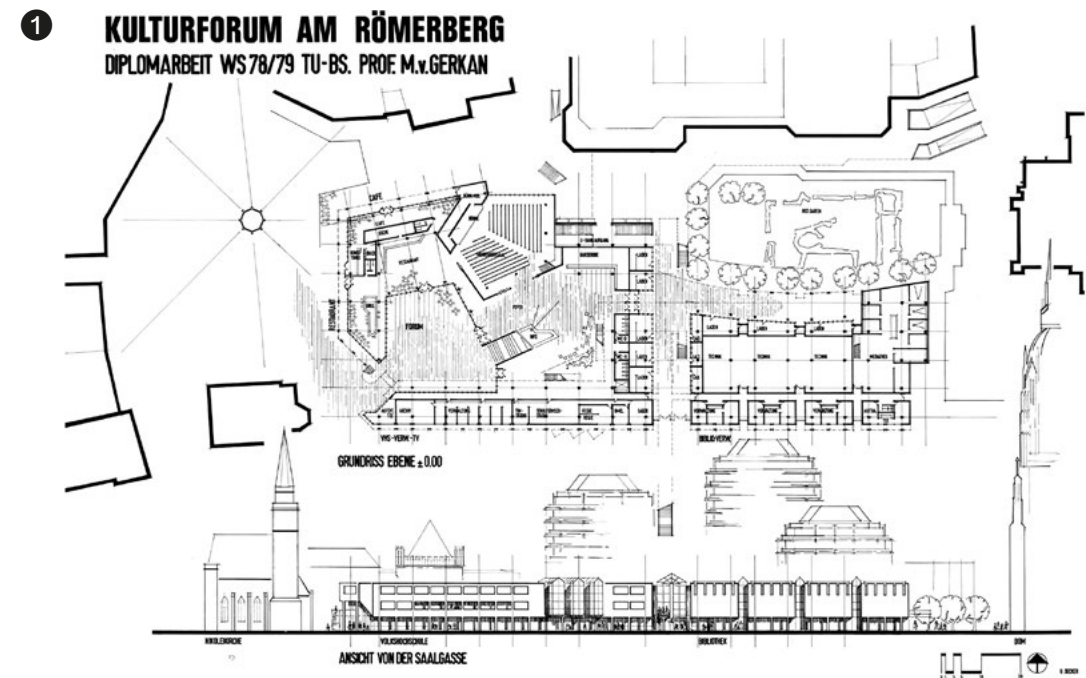
- 1 Ulrich Decker, Kulturforum at the Frankfurt Römerberg, 1979, Prof. von Gerkan, elevation from Saalgasse
- 2 Manfred Bukowski, Türkisches Kulturhaus (Turkish Cultural Center) Berlin, 1980, Prof. von Gerkan, model

- 3 Cornelius Strübing, Fabrica. Center for Creativity and Communication Berlin, 2001, Prof. Schultz, perspective view
- 4 Florian Holik, Leben und Arbeiten vis à vis des Kreml (Life and Works vis à vis the Kremlin), 2005, Prof. Brederlau, bird's eye view
- 5 Maria Biermeyer, Living in Meverode. Residential and community facilities in Braunschweig-Meverode, 1979, Prof. Wagner, plan of site
- 6 Sandi Morese, In-Site Berlin. Life at the Lehrter Bahnhof, 2000, Prof. Ackers, realization phases and exemplary design

Since the end of the 1970s, in Braunschweig, as elsewhere, it became quite common to derive design ideas directly from the morphology of the existing environment.

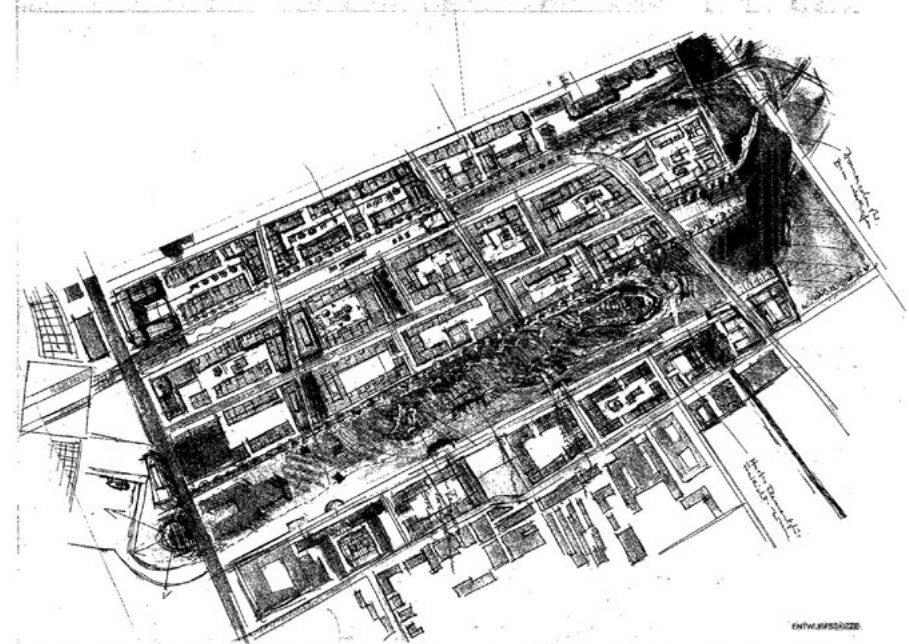
Ulrich Decker's Design for a Cultural Forum at the Frankfurt Römerberg (1979) attempted a mediation between the disparate urban scales of Frankfurt's inner city – only a few years before the reconstruction of the Römerberg plaza's eastern fringe and the construction of the Schirn Kunsthalle. He did this in a still decidedly modern design vocabulary as the biggest possible contrast to the recently realized so-called New Frankfurt Old Town, which tries to overcome the wounds and contradictions of the twentieth century as a smart city in the guise of tradition.

Here, "Block" denotes less an urban planning figure, nor implicitly the approach towards what already existed by means of proportion and material. Rather, "Block" functions as an umbrella term for an avant garde-skeptical method of adopting contexts and invigorating them instead of constructing new ones. In this case, it is no coincidence that the final degree assignments are so often fora for cultural activities [→HEARTH]. Because they attempt to re-establish inner cities, which had developed more and more into mere business districts in the first decades after WWII, more starkly as centers for civic-social life.



Following this mindset, life in the spatial and socio-cultural periphery was also understood as the production of a new home [→EUTOPOS] in an already densely woven (cultural) landscape, like in Maria Biermeyer's *Living in Meverode* from 1979 and Manfred Bukowski's *Turkish Cultural Center* in Berlin from 1980.

Since the unfortunate stubborn debate on the planning of the Berlin inner city in the second half of the 1990s, the critical reconstruction of the historical town layout became a paradigm



IN-SITE BERLIN DIPLOM SS 2000
ISL INSTITUT FÜR STÄDTEBAU UND LANDSCHAFTSPLANUNG
PROF. ACKERS PROF. WEHBERG PROF. BREDERLAU
SANDI MORESE

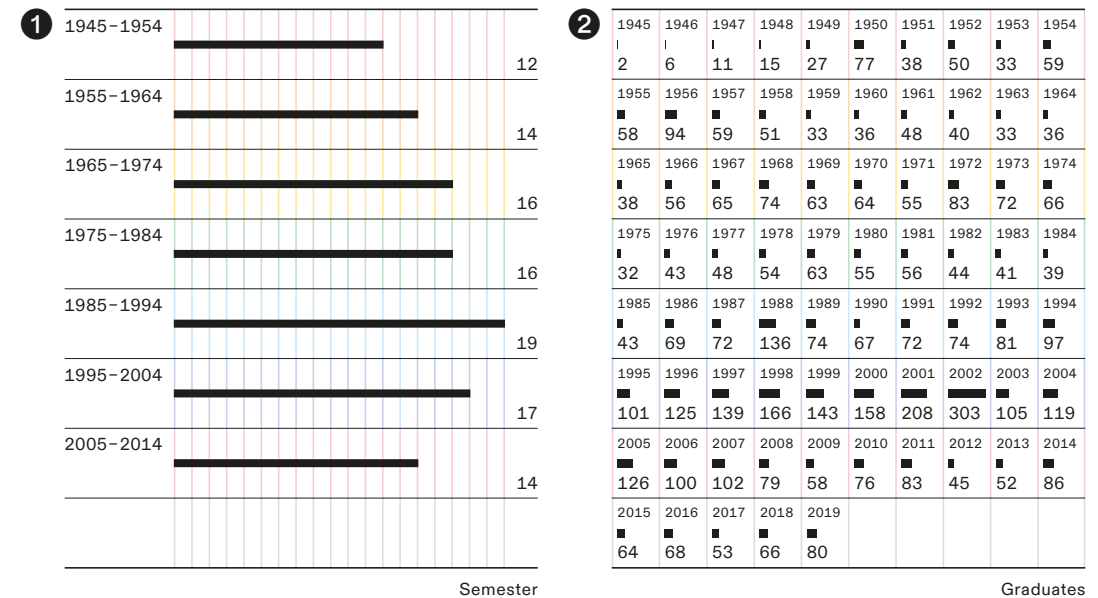
around which future architects and city planners-to-be had to position themselves. Cornelius Strübing's *Fabrica* in Berlin (2001) is an example of this. The interpretation of this paradigm i.e. the critical confrontation with it, continues to present big challenges to the scope of architectural design. Works like Sandi Morese's *In-Site Berlin. Life at the Lehrter Bahnhof* from 2001 or Florian Holik's *Life and Works vis à vis the Kremlin* (2005) testify in this regard to a large spectrum of urban planning approaches championed in Braunschweig in the last twenty years by professors Walter Ackers and Uwe Brederlau as well as Professor Vanessa Miriam Carlow.

- 1 Average length of stay in study
1945–2014
- 2 Number of graduates per year
1945–2019

It is obvious that people who begin studying at the same time and experience a course of studies together consider themselves a class. In the architecture department, the way graduates from a semester worked together, evolving practices over the years, to design the final phase of their studies contributed to this. In the nineties, for example, the introductory exhibit of projects and the final public presentation and evaluation of the Diploma designs by professors in front of an audience in the Maximum Auditorium [→MELDEAUSSTELLUNG] constituted a quasi official framework for these collaborative activities.

One of the recurring rituals at the Braunschweig Architecture School was the Diploma defense – a tradition continued with the Master's thesis. Over the course of several days, graduates present their works to professors, their fellow students and interested guests and put forward their approach, concept, perspective, and design for discussion. The inspiring, critical, and revealing examination of the key working results of the architectural education is a meeting point and a learning environment for the faculty and class alike.

From the 1996/97 winter semester and onwards, some graduates from the architecture department worked on documenting their Diploma theses. They were published starting with the M 1:X assignment and extending through to the 2012/13 winter



semester. They represent a compendium of the final theses with the respective semester volumes.

The classes organized a festive event with a champagne reception, speeches, and a party for the presentation of the degrees and certificates. The designs were once again briefly presented. We shouldn't forget the mid-term party organized in the middle of the long period of work. This may also contribute to the feeling of camaraderie within a graduating class.

Between 1945 and 2020, an average of 70 students an academic year, starting with the winter semester in early October, acquired a degree in architecture or their Master's in Braunschweig. While the class sizes in the early postwar period [→DEPARTURE] were comparatively small, those in the late nineties and early 2000s boasted the highest graduate numbers with over 150 people a year. 137 future architects completed their Diploma theses in the summer semester of 2002 alone. And as a result of changes to the period of time allotted to complete their work, there were an impressive 303 graduates in the 2002/2003 academic year.

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14 Master/Diplom. Dokumentation der Abschlussarbeiten (Documentation of the final theses), Braunschweig 2014.

Master thesis: Abschlussarbeiten des Masterstudienganges Architektur TU Braunschweig (Final theses from the Architecture Master's program), Braunschweig since 2015.

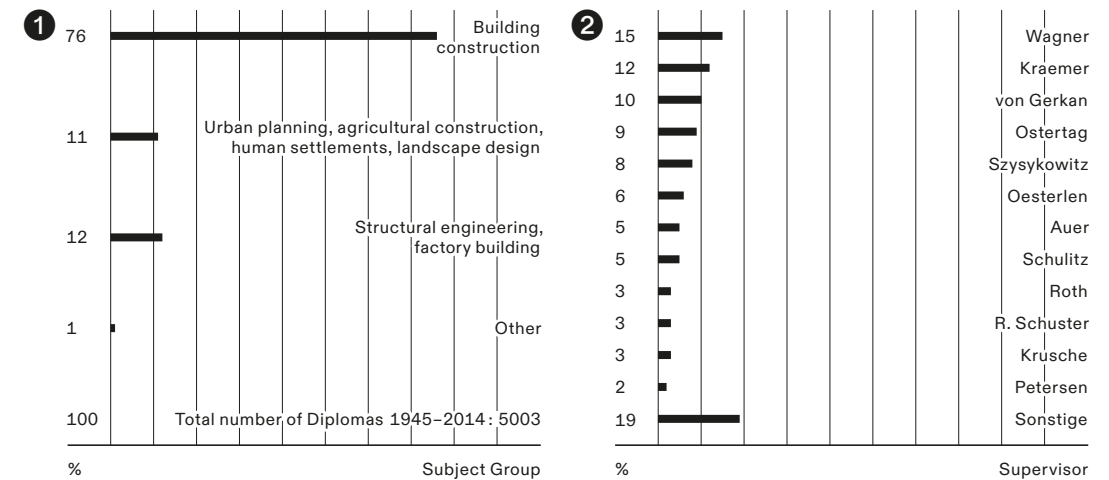
CURRICULUM

- 1 Share of subject groups in Diplomas 1945–2014
- 2 Share of main supervisors in the total number of Diploma theses 1945–2014
- 3 Development of the collegium 1945–2020
- 4 Main supervisors of Diploma and Master theses 1945–2020

Three-quarters of Braunschweig architecture Diplomas were building designs. Just seven professors from the area of building construction supervised around two-thirds of all 5004 Diploma theses between 1945 and 2015. Gerhard Wagner, Friedrich Wilhelm Kraemer, Meinhard von Gerkan, Roland Ostertag, Michael Szyszkowitz, Dieter Oesterlen, and Gerhard Auer were the defining figures. For decades, they provided continuity for the broad majority who submitted their Diploma designs to them.

At the same time, around one-tenth of the Diploma theses were on the topic of urban planning, settlements, agricultural architecture, and landscape design supervised by Johannes Göderitz, Gottfried Schuster, Walter Ackers, Per Krusche, Erich Kulke, and Hinnerk Wehberg among others. Another tenth of the Diploma theses were concerned with the question of structural design and construction for →INDUSTRY. These were primarily supervised by Walter Henn, Helmut C. Schultz, Carsten Roth, and Werner Kaag. During the forties and fifties, a few Diploma theses on building materials science, building statics, and interior design were added to building construction and its two associated subject areas, their ratio basically remaining constant over the decades. In later years, assignments in development planning also followed [→GLOBAL].

One unique aspect of the architecture education at the Technische Hochschule, or the Technische Universität Braunschweig



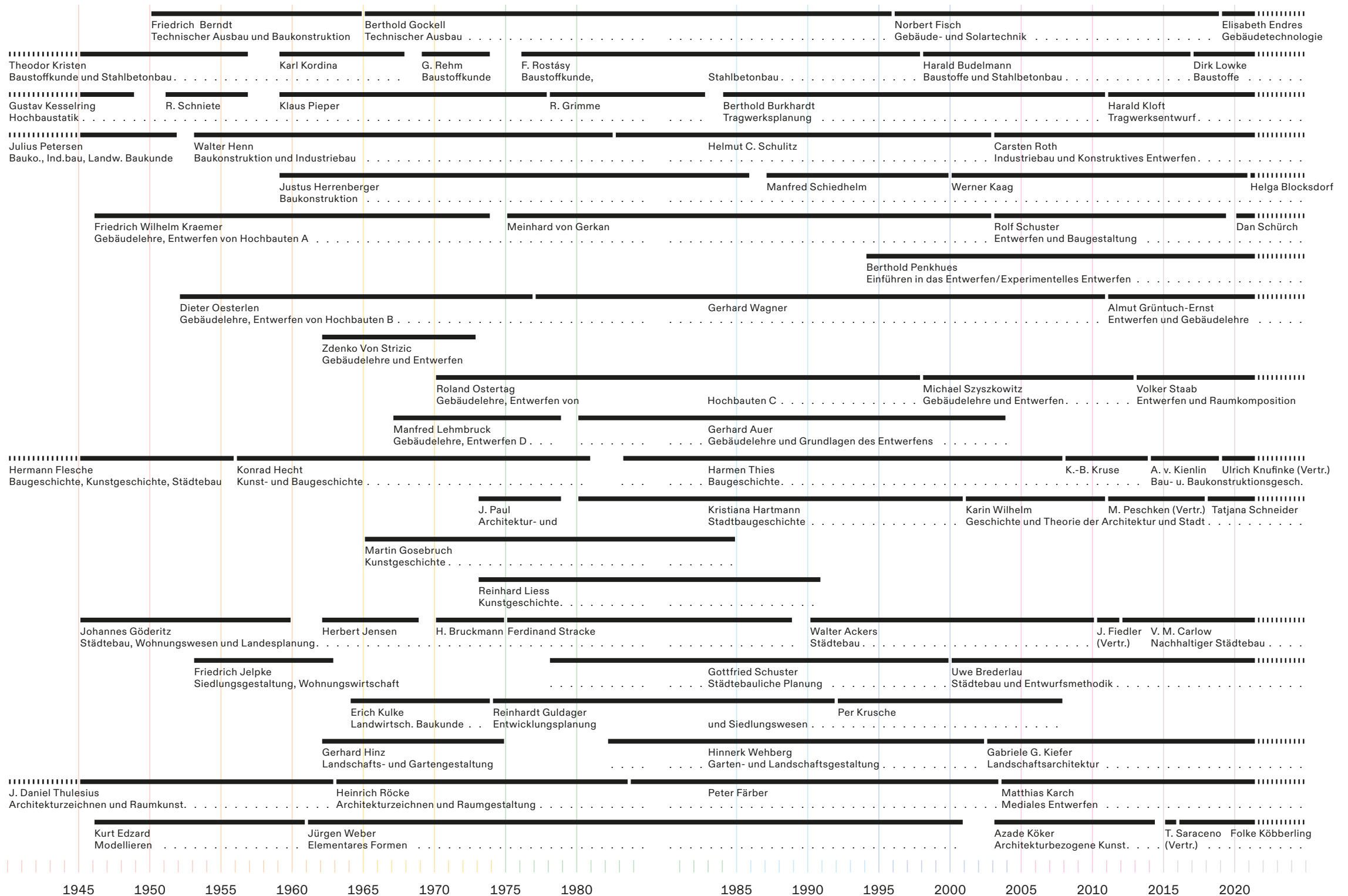
as it would be known from 1968 onwards, is that numerous chairs never assigned their own final theses before the Master's was offered. In fact, they were only somewhat involved in the evaluation process. Though course content like technical interior work, architectural and urban history, architectural theory, structural design, drawing, and basic sculpting was also compulsory for prospective architects, they were qua exam regulations not included among the topics for Diploma theses. Over the years, it also became common for some chairs to devote themselves almost exclusively to topics ranging from the fundamentals through to the intermediate Diploma while other chairs only supervised the upper semesters. This resulted in a narrow field of 'Diploma-worthy' sub-disciplines and a few commanding lecturers. And this shaped the essence and perception of the Braunschweig architecture Diploma for decades. This conscious constraint and emphatic focus on building designs contributed decisively to what Ulrich Conrads was attempting to identify with his term Braunschweig School in 1961.

The conventions and structures outlined above endured for a long time with regard to the Diploma theses. They also largely defined external perceptions of the faculty and its students. It was first Werner Kaag and then Berthold Penkhues who burst the constraints in the 2000s by also assigning Diploma topics within their chairs, which were traditionally confined to the role of supervising intermediate Diploma students. Extensive freedoms accompanied the Bologna process, also with regard to the matter of final theses [→MASTER].

FURTHER READING

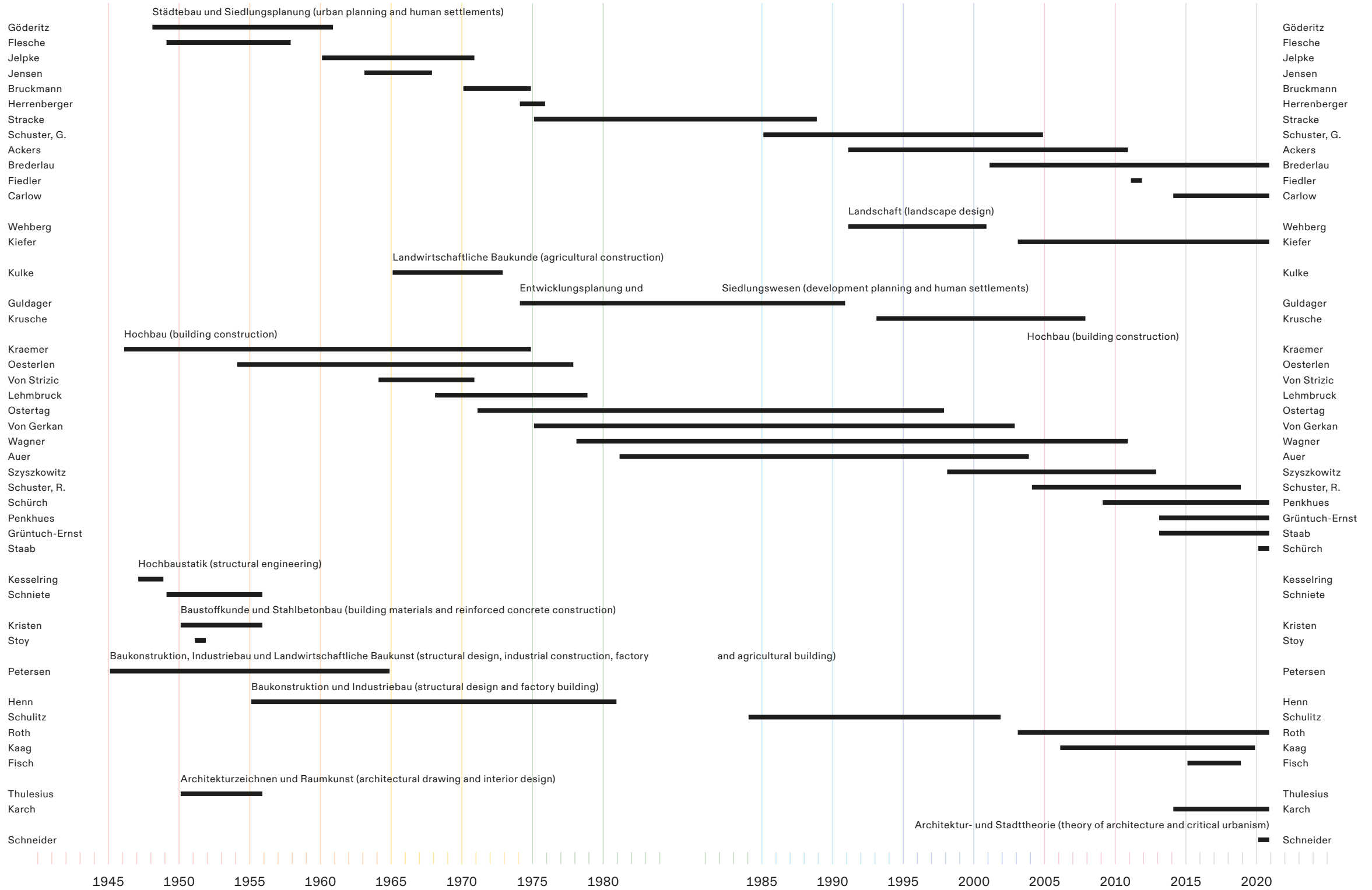
Conrads, Ulrich: Lehrstühle und Leerstühle. Eine Randnotiz zu den Bauten in diesem Heft und zu einigem anderen mehr (Chairs and Empty Chairs. A side note on the structures in this issue and some other issues), in: Bauwelt, Vol. 52, 1961, No. 11, p. 305.

3 Development of the collegium 1945–2020



4 Main supervisors of Diploma theses 1945–2015

Sorted by subject groups



DEMOCRACY

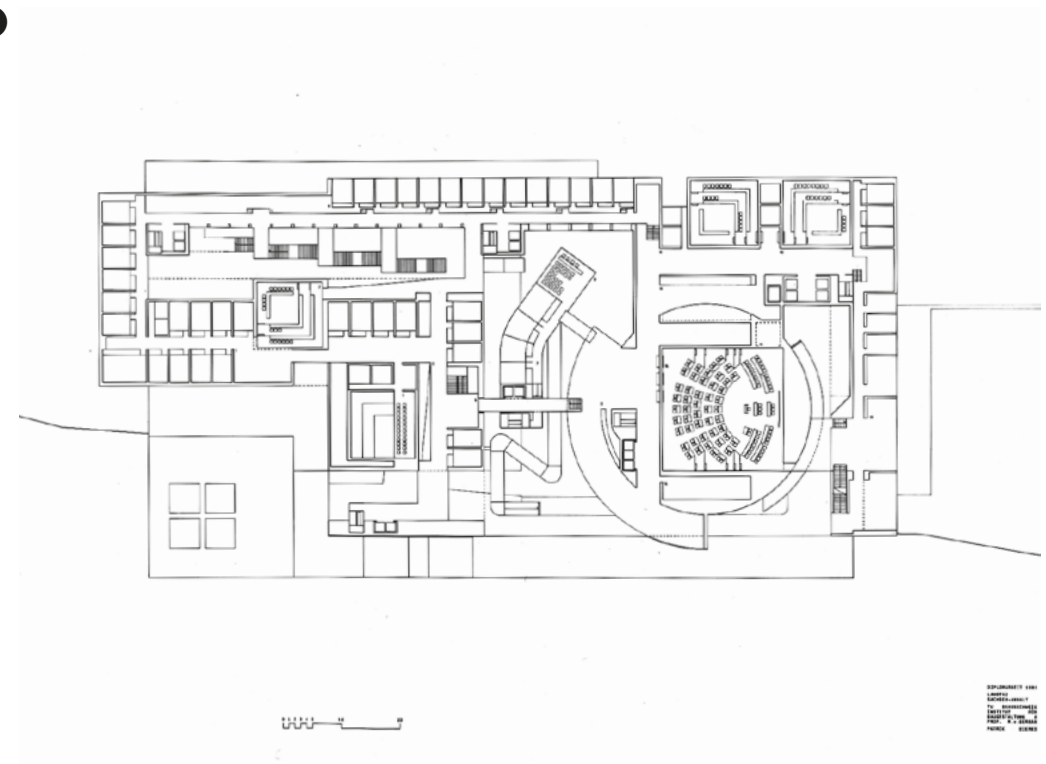
- 1 Patrick Dierks, Saxony-Anhalt State Parliament, 1991, Prof. von Gerkan, ground floor
- 2 Rolf Toyka, Goethe Institute at Weißenhofsiedlung, 1978, Prof. Ostertag, axonometric projection
- 3 Hinrich Schwanitz, Design for a State Parliament Building, 1961, Prof. Oesterlen, ground floor plan

What does democracy mean? According to its name, it is the sovereignty of the people. But what does that entail? At least in today's western understanding: free elections which result in a multi-party parliament; government and opposition – a culture of debate as well as the protection of fundamental and human rights.

Its most important architectural embodiment is parliamentary places of assembly. "Democracy knows no binding canon of forms. It takes on formal language and imagery it comes across, which it assumes and assimilates from the historical-political tradition of the respective culture. Democracy thrives on the plurality of its own production" (Hans Vorländer). Accordingly, there is no ultimate response to the question of how a parliamentary building should look. It is subject to ongoing perceptions of representation in its respective societies.

In 1961, the design task for a state parliament building in Braunschweig (!) was issued to architecture students at the TH Braunschweig by Prof. Oesterlen. Hinrich Schwanitz responded to the question of how a parliamentary structure might look with a building design reminiscent of an unknown flying object. It appears to glide into its designated location near the old train station on the →OKER. In Schwanitz's plan for the ground floor, one can discern that the pivotal moment of his design is the plenary.

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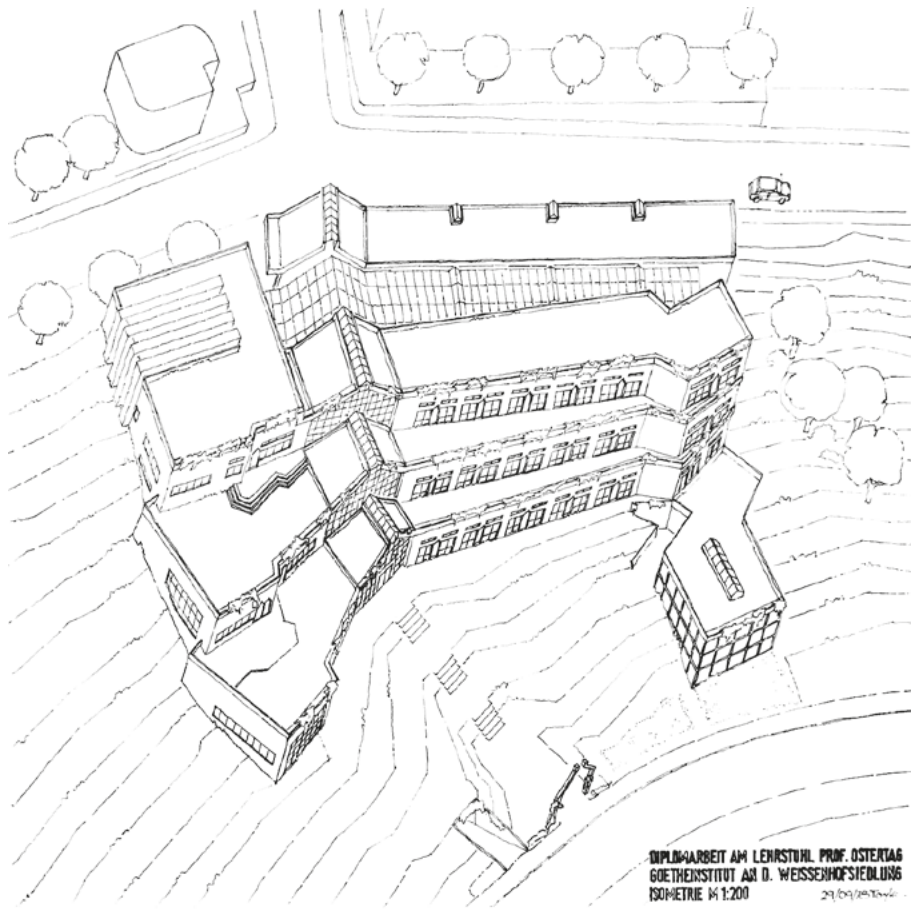


Its radial form [→KURVE] reflects thoughts of equality associated with democracy. In contrast, Patrik Dierks and Wilhelm Springmeier responded to Prof. Meinhard von Gerkan's design task for a *Saxony-Anhalt State Parliament* in Magdeburg in 1991. The major transition in German-German history resulted in new design tasks for the students of Braunschweig architecture professors [→DEPARTURE]. In Dierks' draft, though the plenary is also circular, it is nevertheless contained within a rectangular building construction.

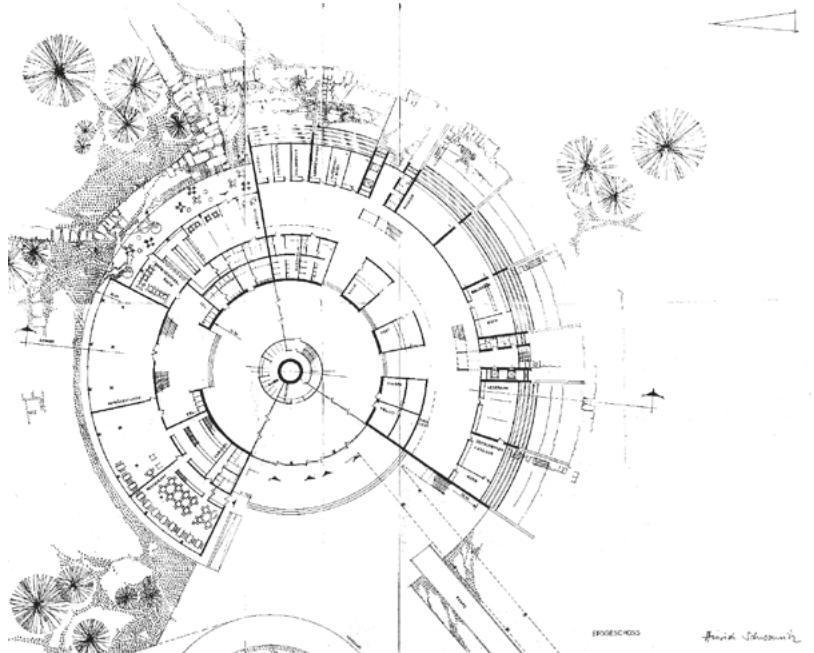
The right to freedom of opinion is also integral to democracy. As such, we would like to include works by André Poitiers alongside the two parliament designs in this section: the *Greenpeace Base* in Hamburg from 1989. The NGO uses campaigns to criticize ecologically questionable business and everyday human practices as well as those of governments, and in so doing posits discussion topics around a societal understanding of a world worth living in [→EUTOPOS].

Participation in education and culture is also a key democratic concern. Rolf Toyka's *Goethe Institute at Weißenhofsiedlung* on the Killesberg in Stuttgart (1978) is dedicated to an essential element of German cultural policy. Because the Goethe Institute has not only been an intermediary for German language and cul-

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ture both nationally and abroad since its inception in 1951, but has also been a flagship of an understanding of democracy specifically associated with post-war Germany's commitment to education.

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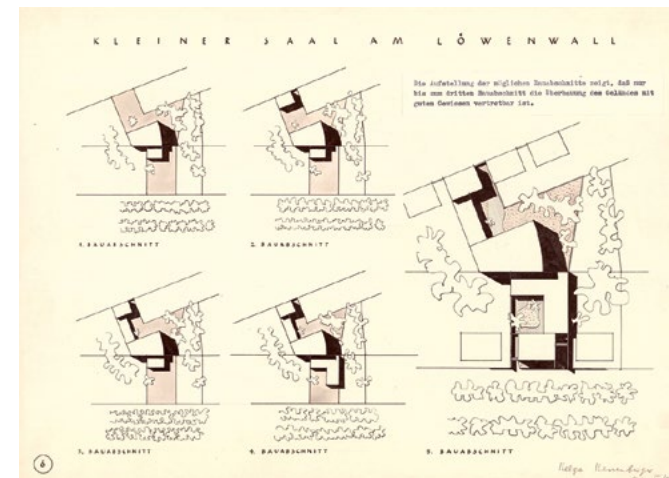
DEPARTURE

- 1 Helga Herrenberger, Marionette Theater at Löwenwall, 1948, Prof. Kraemer, studies of the building dimensions and sketch of the entrance area
- 2 Willi-Ernst Schüler, Uelzen Train Station, 1949, Prof. Kraemer, arrival hall and elevations
- 3 Hans-Joachim Pysall, Design for a Sparkasse (savings bank), 1955, Prof. Kraemer, model
- 4 Frank Sommerfeld, Concert and Congress Building, 1954, Prof. Kraemer, perspective view with remains of the Braunschweig Palace
- 5 Maximilian Ludwig, Formen für Prozesse (forms for processes), 2019, Prof. Penkhues, landward side, view
- 6 Wolfram Putz, Rerik. Auferstanden aus Ruinen: Zwischen den Orten – die Unschärfe der Ränder (risen from ruins: in-between places – the blurring of the edges), 1995, Prof. Wehberg, collage

Though everyday life during the early post-war years was also obviously marked by loss and hardship for students of architecture, the imminent re-construction of Germany presented them with a period of prospective opportunity. One which was predominantly fulfilled when funding arrived for the Miracle on the Rhine. In the 1950s, an above average number of architecture commissions in the country went to members of the TH Braunschweig. This is what spurred talk of a Braunschweig School in professional circles, a title that even the Braunschweigers themselves did not feel compelled to make their own.

The oldest preserved Diploma in the Collection of Architecture and Civil Engineering (SAIB) after World War II – the *Marionette Theater* by Helga Herrenberger, presented to professors Kraemer and Thulesius in late 1948 – is evidence of an attempt to connect the trends of modern architecture at the time and blend them into the classicist city planning of the Braunschweig Löwenwall. Departure or repair? Indeed, this was not a contradistinction in Braunschweig, contrary to the cliché of the ‘Second Destruction’ in the post-war period. The lighter spaces rid themselves of the imposing gestures of a not so distant fascist past without completely forgetting older traditions. The illustrations e.g. also of the *Uelzen Train Station* (Ernst-Willi Schüler) show architecture designed for people traveling lightly, yet not devoid of memory.

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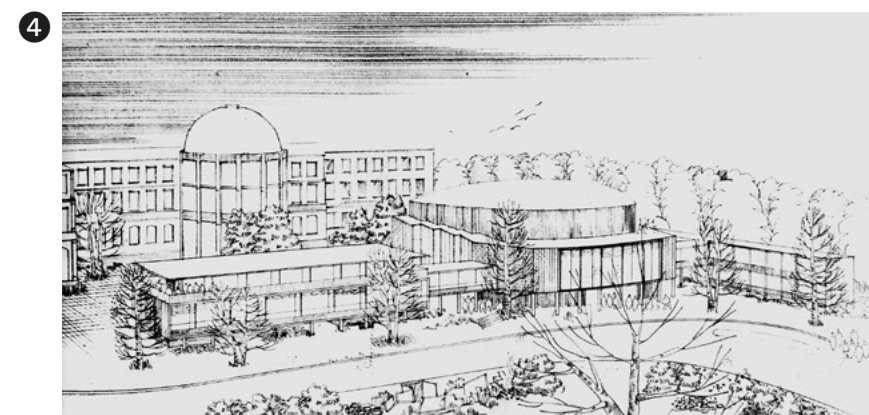
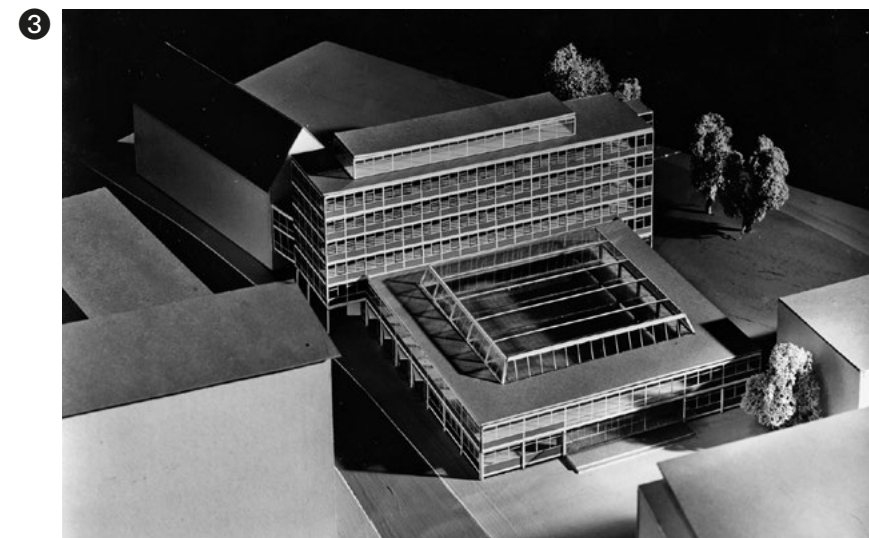
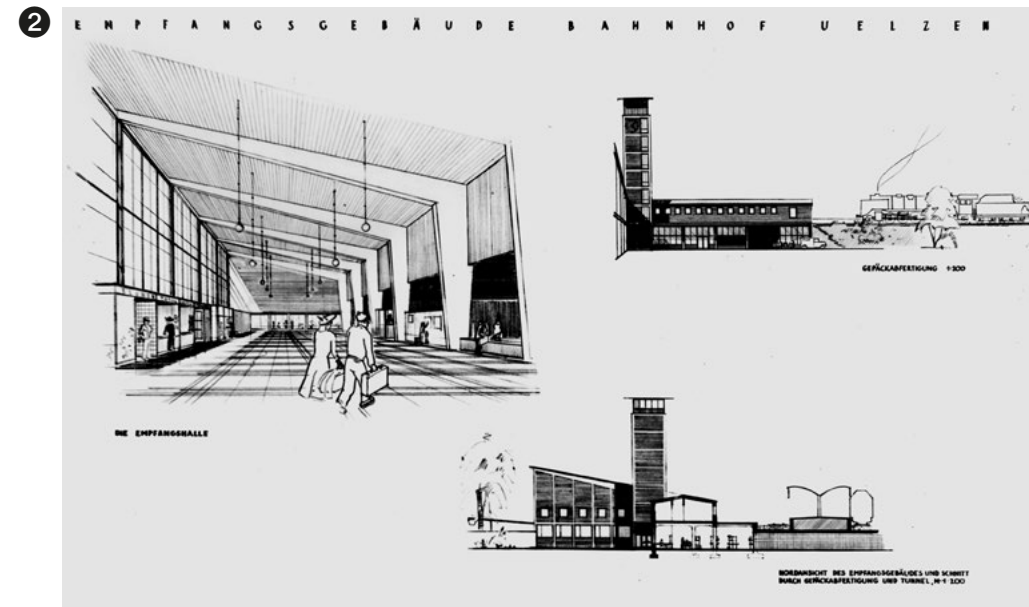
Friedrich Wilhelm Kraemer's excursions with students to the centers of contemporary Scandinavian architecture in 1951 and then to the USA in 1955 left deep impressions, which immediately find expression in Diploma designs.

Hans-Joachim Pysall dedicated his design of a savings bank in Osnabrück (1955) to the elegance of International Style. He breaks up the spatial planning program of the bank tellers' hall and offices into two building structures – a flat cube and a seven-story rectangle – and in so doing achieves unique urban construction suspense in the form of a variation on the Lever House. A design idea, which countless bank buildings nationwide were based on in the late 1950s.

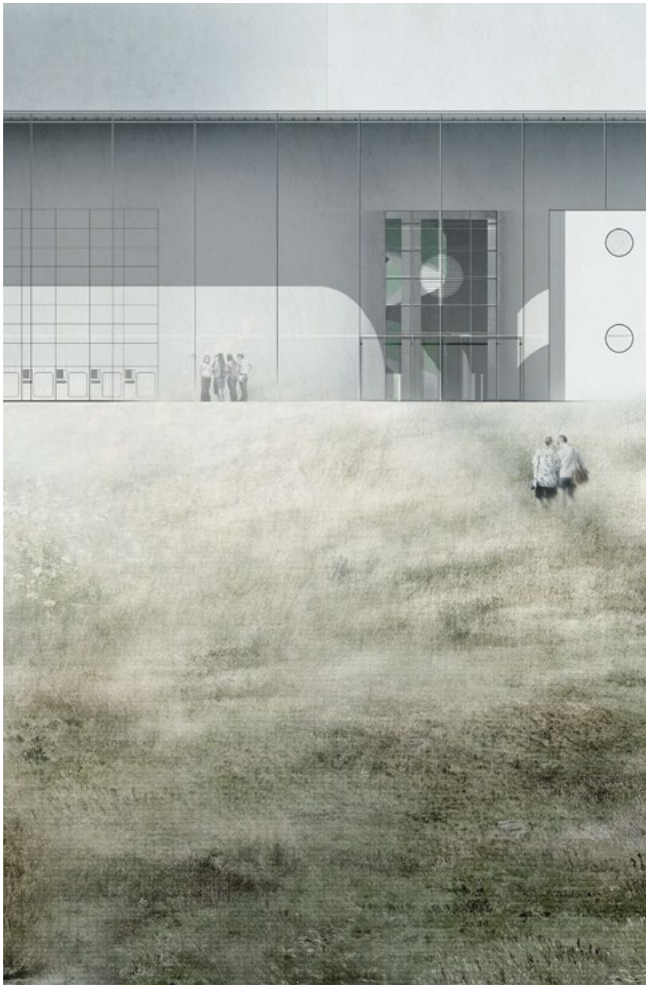
One can say, this architecture posits a departure of German post-war society through conscious connection to the international architectural scene and, "in an alternative concept to an architecture of steel and glass conjured up as democratic, attested to one of the grimmest periods of German history" (Karin Wilhelm). This is well demonstrated by Frank Sommerfeld's 1954 design of a *Concert and Congress Building*, which integrated the ruins of the Braunschweig Palace – a topic, which Sommerfeld's mentor Friedrich Wilhelm Kraemer also grappled with intensely during this period.

Three areas of focus dominate the Diploma drafts for the first ten years following the war: commercial buildings, cultural and recreational buildings, and schools. It is striking that the most urgent construction task at the time, the residential building, played almost no role at all in Diplomas. Although Justus Herrenberger and Hans Broos busied themselves with a study on the reconstruction of the Hagenmarkt (unfortunately not preserved), even this was more about the composition of the urban building ensemble than the construction of housing. In Horst Goebel's development plan in the area around the Augusttor traffic intersection in Braunschweig, supervised by Johannes Göderitz in 1955, the residential program already plays a more significant role, even though the composition of road space is still in the foreground.

1989 also represents a historical turning point for architecture, which allowed for the rise of a new spirit of departure among graduates of the late 1980s [→EUROPE, DEMOCRACY]. However, events on the other side of the now fallen 'Iron Curtain' overlapped with already existing trends towards a globalized architecture [→GLOBAL]. Peter Ruge's Diploma *Olympiade 2004 in Hamburg* from 1988 is to be viewed within the context of this departure. His vision for the restructuring of Hamburg marked the end of the post-war period



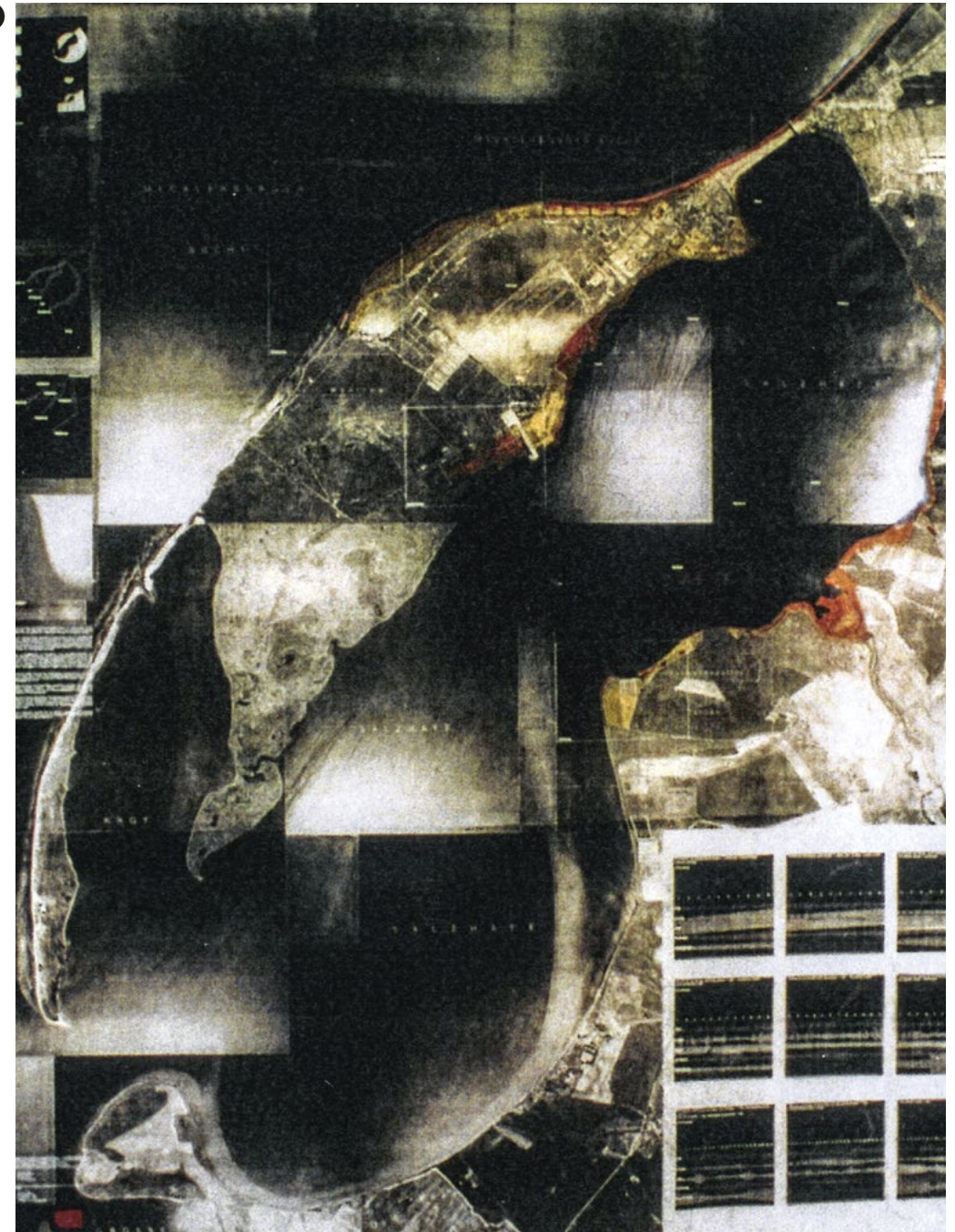
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and German special status since the city was to be poised for the global competition for attention and appearance. “This city should be observed, analyzed, postulated on”. Ruge’s comment on his Diploma illustrates that the departure was to be designed not as a tumultuous blunder into an unknown future, but rather as a methodical reconstruction and connection based on analysis [→OLYMPIA].

Two decades into the 21st century, the debt of the capitalocene is such a burden that the departure into a new era is just as urgent as making a tumultuous blunder is out of the question. The underlying notion behind Maximilian Ludwig’s *Forms for Processes* (2019) is to see change as an opportunity: a →FLUGHAFEN, which already considers the future obsolescence of this highly-determined building type. In Ludwig’s visualisation instead of passengers hectically jumping out of taxis, we now see passersby in casually approaching the structure from a yet only vaguely defined future landscape, as if on their way to a picnic.

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- 1 Simona Schröder, Kultur.Raum. The Amsterdam Centre for Cultural Heritage and Identity, 2016, Prof. Karch, axiometric model
- 2 Oxana Krause, Magiczny Plac – Stadthaus (town hall) Krakau, 2003, Prof. Szyszkowitz, section
- 3 Alexander Butz, FilmKultur Forum Zagreb, 2007, Prof. Szyszkowitz, isometric view and siteplan
- 4 Thomas Willemeit, Civic Center in Riga, 1997, Prof. von Gerkan, model
- 5 Tim Unnebrink, Living Bridge: Cultural Bridge in Görlitz/Zgorzelec, 2005, Prof. Wagner, site plan and view (collage)
- 6 Martin Tamke, Going Public. Neue Börse (new stock exchange) Strasbourg, 2002, Prof. Szyszkowitz, perspective view

Given the experience of two World Wars ignited in the middle of Europe, the pursuit of a peaceful coexistence between European people has taken particular precedence in the political leanings of the Federal Republic of Germany. As such, issues related to European integration were also always important in Braunschweig architectural studies. In particular, given the fall of the 'Iron Curtain' and the gradual eastern expansion of the European Union, the process of European Integration resulted in building assignments that repeatedly became assignments for graduates. Event venues and cultural institutions in Riga (Andreas Symietz and Thomas Willemeit, 1997), Krakow (Oxana Krause, 2003), and Zagreb (Alexander Butz, 2007) attest to the growing allure of eastern European cities and their civil societies for the Braunschweig School of Architecture.

This eastward gaze took on even greater importance with the appointment of Professor Szyszkowitz in 1998. The architect, who practiced in Austria, not only creatively mixed up what was stylized as Braunschweig School in attributions from previous decades [→RIEGEL, BLOCK]. He also emphatically advocated the expansion of the circle of cities, inspiring Braunschweig architecture students to apply their skills to a whole new region.

In 2005, Tim Unnebrink intentionally attempts a structural surmounting of former hostilities. With his *Living Bridge: Cultural*

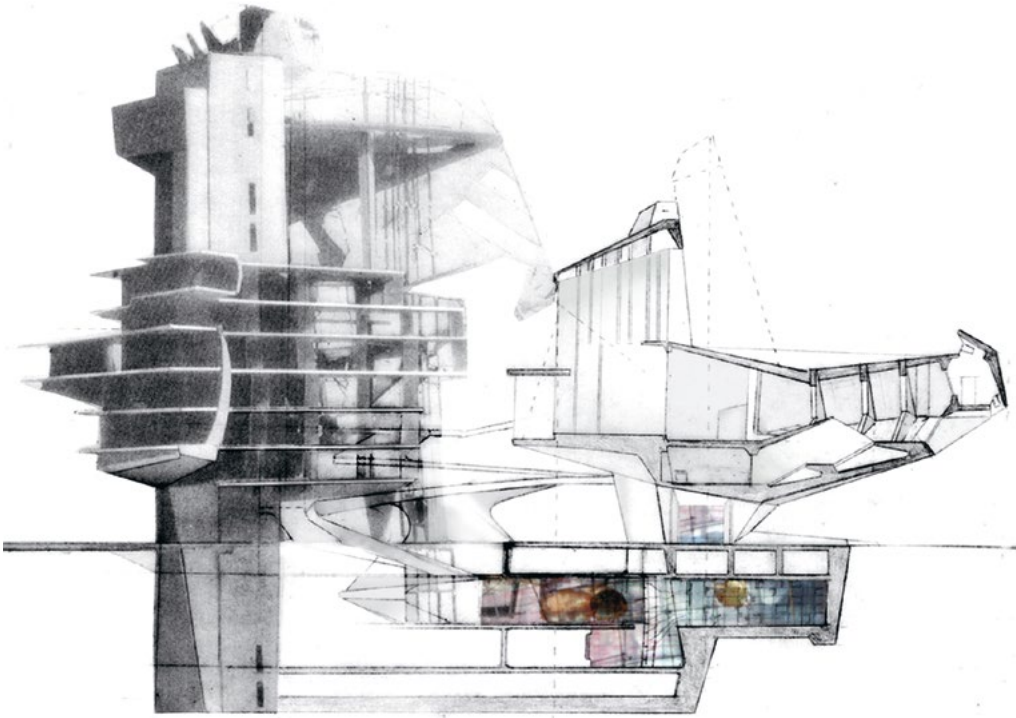
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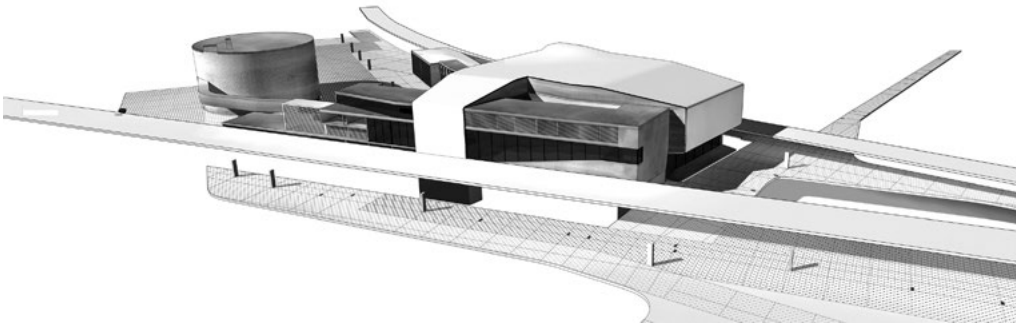
Bridge in Görlitz/Zgorzelec, he reinterprets the German-Polish border river as a space of common identity. In the composition of the community center, you feel like you can read the historical confrontations and bridges, which now thematize and enforce solidarity like “seams” (Unnebrink).

One path to Europe also lies in the architectural formulation of common European institutions. Julius Klaffke's *European Central Bank in Frankfurt am Main* designed in 2000 strives to give

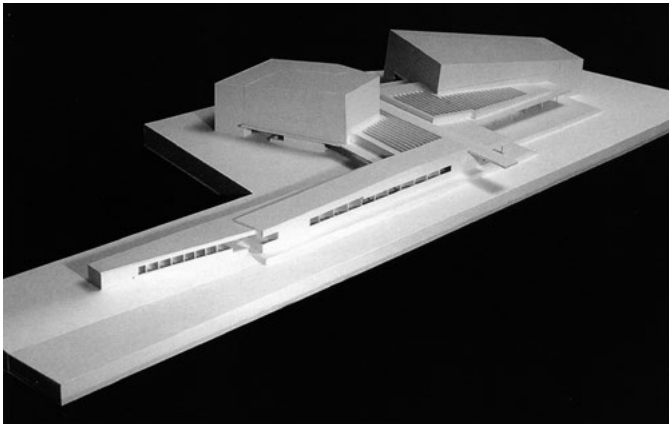
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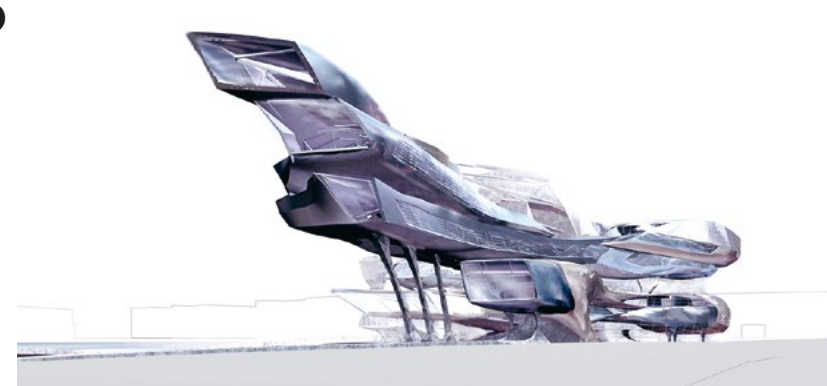
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the euro, which was first introduced as a deposit currency one year earlier, a communicable image in the media. Martin Tamke's design of a European stock exchange (*Going Public New Stock Exchange Strasbourg*, 2002) is also dedicated to the new reality of a pan-European capital market. However, one might detect in its forms a comment on the experience of its virtualization [→GLOBAL].

Europe's fragility and deepening ties are closer together than thought possible only a few years ago [→MASTER]. In this light, structures like Simona Schröder's *Kultur.Raum. The Amsterdam Centre for Cultural Heritage and Identity* from 2016 acquire particular importance when it comes to questioning the relationship of local, national, and European identities in terms of their architectural expression in the future as well. What remains open for now is whether and which spatial design functions the exit of the United Kingdom from the European Union ratified in January 2020 will usher in.

EUTOPOS

- 1 Hartmut Jentzsch, Schloßpark Braunschweig, 1972, Prof. Ostertag, model
- 2 Reinhard Hoffmann, Alternative Living in Rural Areas, 1978, Prof. Guldager, ecological system (detail)

- 3 Peter Freudenthal, Residential and Community Facilities in Braunschweig-Melverode, 1979, Prof. Wagner, "Contact-Computer"
- 4 Gerold Götze, Altenhilfezentrum (center of care for senior citizens) Braunschweig, 1971, Prof. Ostertag, floor plan ground floor
- 5 Günther Klatt, Town Development Engerode Calbrecht, 1980, Prof. Guldager, perspective view with section
- 6 Janine Nottenkämper, Neuland Tagebau Hambach (Hambach open pit mine – new territory), 2018, Prof. Kiefer, perspective view
- 7 Maya Chalhoub, Badna N'ish (we want to live), Jaramana/Damascus, 2017, Prof. Grüntuch-Ernst, mapping future interventions

Design is always also working on the future. The design of that which is to come can strive towards the unattainable, towards utopia, or it can aim to realize the eutopos, the beautiful and livable in the here and now.

Under the banner of this second quest, sustainability, social integration, and inclusion are currently atop the political agenda – all values, which are continuously developing and only assume shape when concretely debated. This is reflected in the final theses from the architecture department.

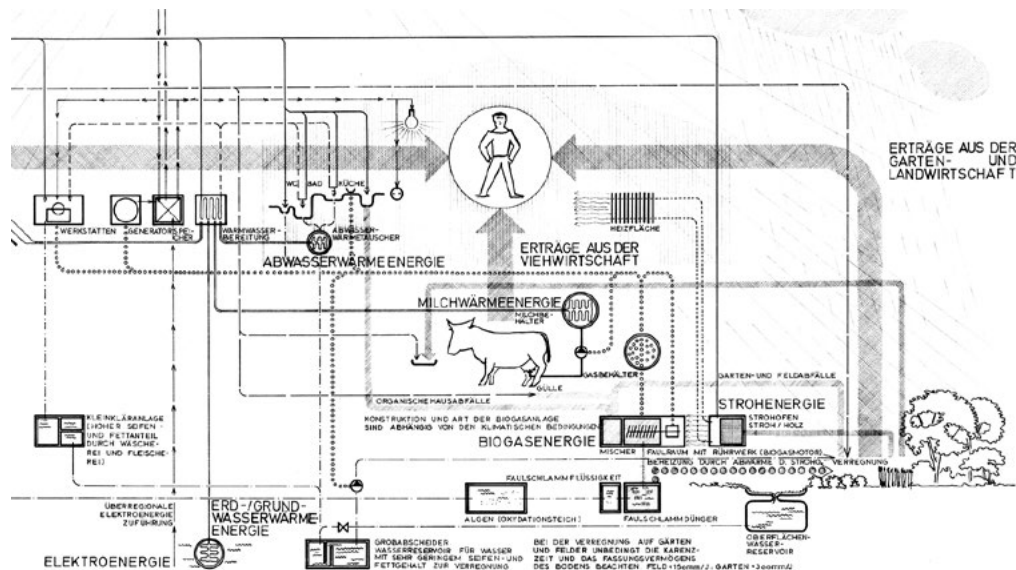
In this spirit, Gerold Götze and Wolfgang Wiechers pursue the beginnings of a eutopian accessibility in 1971. Their utilities for a senior aid facility attempt to ensure mobility and autonomy for the elderly through a fine-grained interlocking of private, communal, and public areas. The *Residential and Community Facilities in Merverode* by Peter Freudenthal and Maria Biermeyer, built in 1979, strive to unite city, village and residential groups, living and leisure of various users (→HEARTH) with their seemingly naturally evolved creases and waves. Using the work of Herman Gaffga as an example, one can recognize how citizens were being more integrated into the planning process since the end of the 1960s. Already back then, however, there was the question of whether public life and encounters in the city of the future were shifting into digital spaces, as hinted at by Freudenthal's "Contact Computer".



In particular, the work being done at Prof. Guldager's Institute for Development Planning and Human Settlements were tackling approaches early on that would be described as Transition Town Movement today. Reinhard Hoffmann's design on the topic of *Alternative Living in Rural Areas* from 1978 reacts to urbanization, environmental pollution, and the energy crisis with the start-up of an agricultural community, which "is intended to be self-sustaining in crucial areas of daily life" (Hoffmann). In addition to the conception of self-assembled and expandable residential buildings, the planning service to be rendered also included the presentation of the crop rotation to be yielded from the fields. Günter Klatt's 1980 urban planning work, *Town Development Engerode Calbrecht*, is dedicated to the emerging search for low-energy solutions for his buildings, and it declares the loose concentration of town neighborhoods as the Eutopos of the time.

These works are a conscious opposition to the housing developments of the 1960s and 1970s. Their promises of worthwhile living were increasingly decried "inhospitable" (Mitscherlich), although Ernst Detlef Kohl's 1965 sectional drawings for a *Residential Area in Münster-Gievenbeck*, for example, demonstrate that the blanket reproach of a lack of careful human scale in the common building standards of the time is not justified upon closer inspection: the recipe for separating architecture and traffic also

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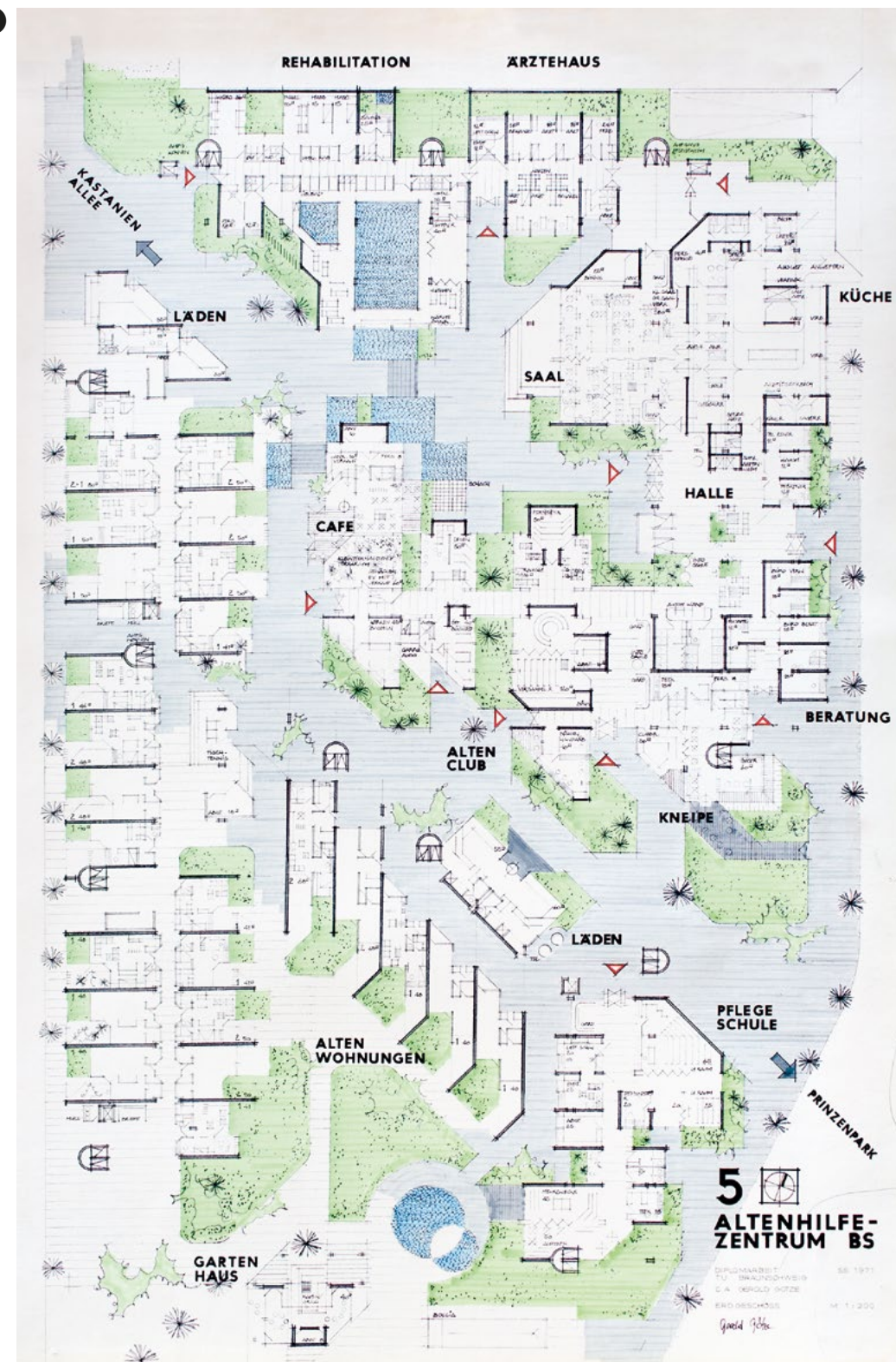
starts with people and their needs. What changes over time is not the aspiration of the Eutopos but rather its concrete formulation.

With the Club of Rome's warning in 1972 and the establishment of the Green Party in 1980, the limits of growth and environmental protection now slowly enter into the collective consciousness.

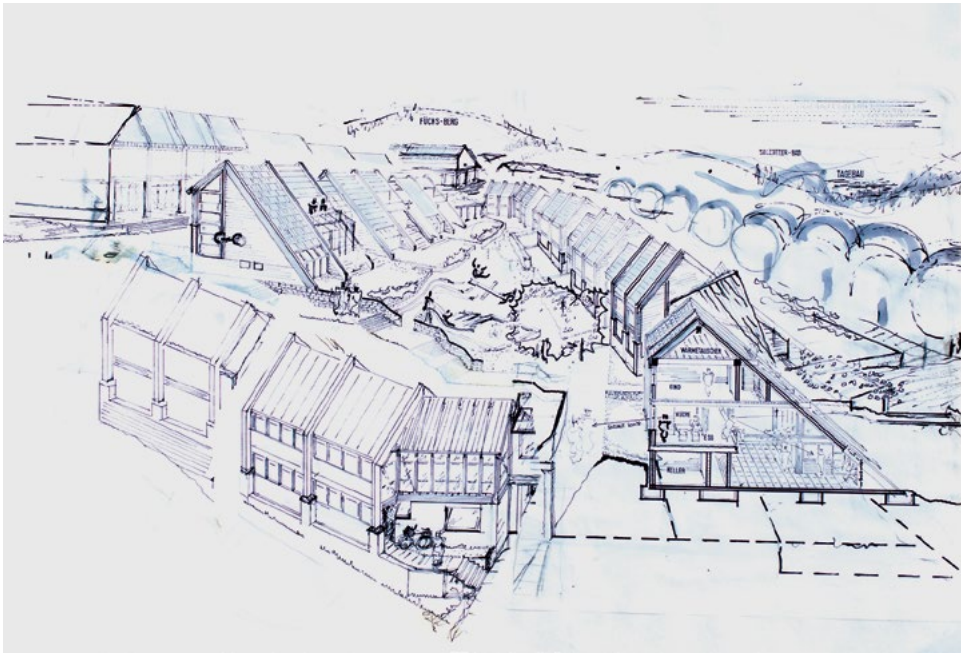
In this spirit, the circle of addressees of eutopian design is also extended to others beyond 'human critters' (Donna Haraway) in Janine Nottenkämper's *Neuland Tagebau Hambach* from 2018. She develops a scenario for the Hambach surface mine to turn this monument of a now obsolete value creation (if not yet an obsolete use of resources) into a habitat living space fit for creatures, which no longer have any refuge in the adjacent agrarian desert.

In order to criticize the present and outline the future, we need alternative imagery. Hartmut Jentzsch's design of a thermal bath in Braunschweig's Schloßpark from 1972 is one such

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work, which postulates new instead of existing worlds. Between still visible wartime rubble [→DEPARTURE] and an already perpetual gridlock [→AUTOMOBILE], the site of the city's former ducal palace was to be reborn as a lively space for citizens.

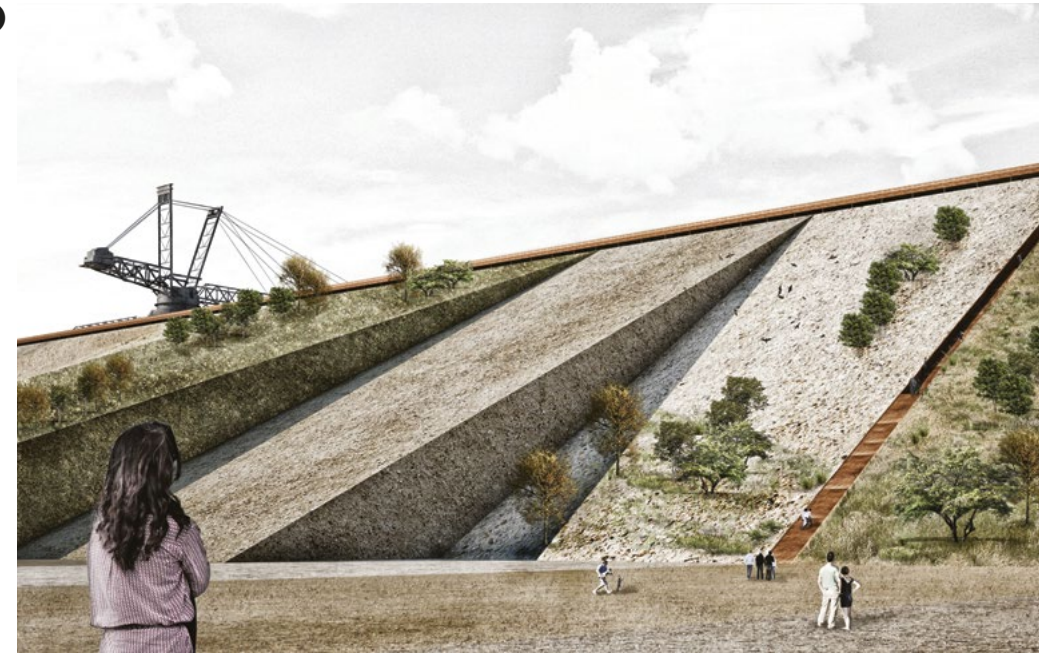
Anne Kettenburg and Maya Chalhoub, for their part, go in search of worthwhile living beyond beautiful design. In the *Maritime City Bremerhaven*, permanently flooded through the dramatic rise of the sea level, Kettenburg (2013) asks up until which limits a space should be habitable, and explores potential scopes of action for residents to make the future effects of climate change tangible today and critically monitor them [→WATERBANK]. By contrast, Chalhoub turns her attention to the immediate present, 2017. In *Badna N'ish (we want to live)*, she takes great pains to analyze the effects of internal displacement on the city of Jaramana near Damascus as a result of the Syrian crisis. On this basis, she develops concrete structural and architectural encroachments in order to improve the conditions of living together for the dispossessed and those already present under the banner of self-empowerment and community building and by means of an 'urbanism of critical care'.

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FLUGHAFEN

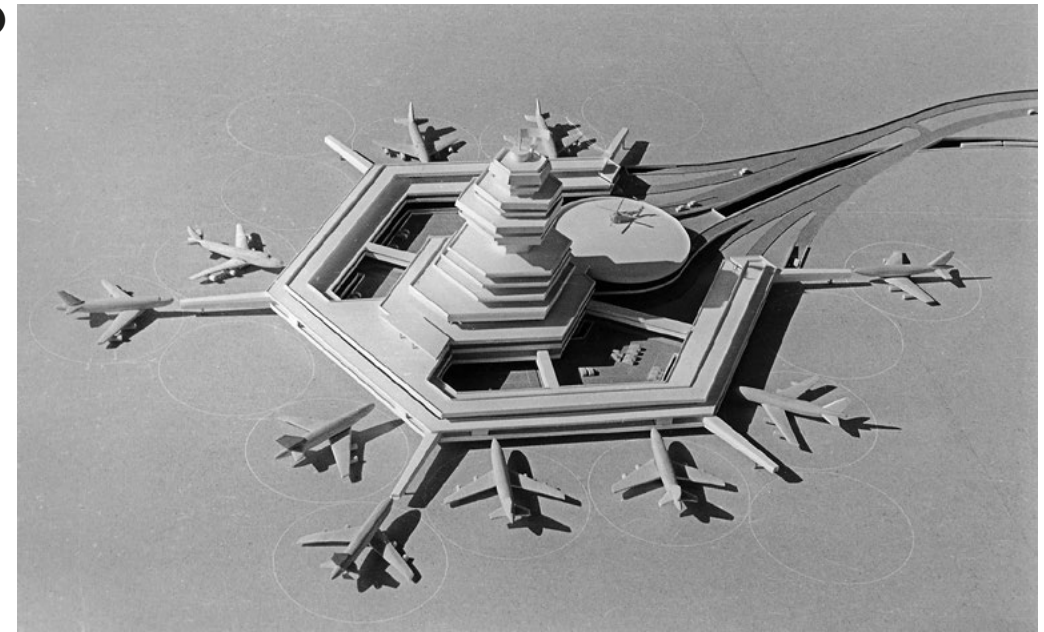
- 1 Meinhard von Gerkan, Fluggast-Abfertigungsgebäude (passenger terminal building) in Hannover-Langenhagen, 1964, Prof. Oesterlen, model
- 2 Hans-Joachim Witt, Fluggast-Abfertigungsgebäude (passenger terminal building) in Hannover-Langenhagen, 1964, Prof. Oesterlen, section with detail
- 3 Stefan Tuchen, Final Call: BER Terminal 2, 2018, Prof. Penkhues, top view
- 4 Christoph Peetz, Welt. Raum. Flughafen – Spaceport Europe, 2014, Prof. Penkhues, perspective view of interior
- 5 Sebastian Kaus, esec – european space exploration center, 2010, Prof. Roth, perspective view of interior

Around 1960, aircraft construction made immense progress on the use of energy-efficient turbo jets in passenger planes. This gradually made it possible for the airplane to become the mode of mass transportation we know it as today. For architects in industrial countries, this opened up a vast number of commissions for passenger airports in which to compete: a task which came with tremendous prestige, not least of all because of the technical challenges and the building type's association with progress.

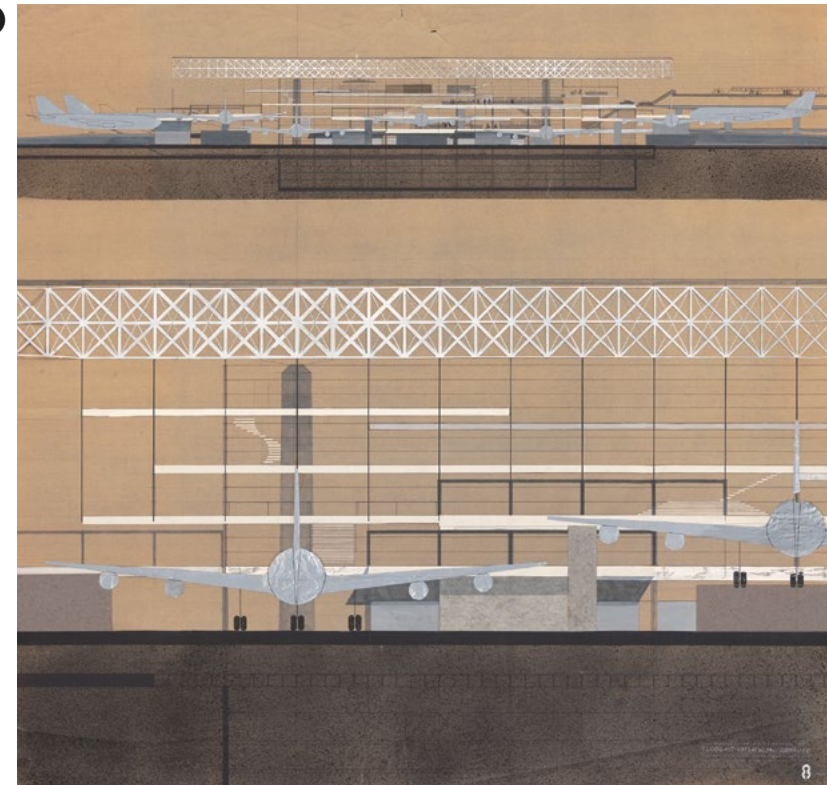
In Braunschweig, professors Kraemer, Göderitz, and Petersen had already assigned sports airports and flight schools as Diploma designs back in 1952. Three years later, the first terminal for the passenger airport in Langenhagen (Hannover) was given as an assignment. The real construction of this complex in the sixties motivated a comprehensive research project in Zdenko Strizic's institute, which is also documented with film material in the TU archive (SAIB), as well as another Diploma assignment for the terminal in Hannover in 1964. This apparently had long-lasting effects on Braunschweig's architectural education.

Meinhard von Gerkan finished his studies at the time with a spectacular concept that one year later he further developed with Volkwin Marg for their entry for Berlin-Tegel airport competition. Winning this attracted international attention and helped to estab-

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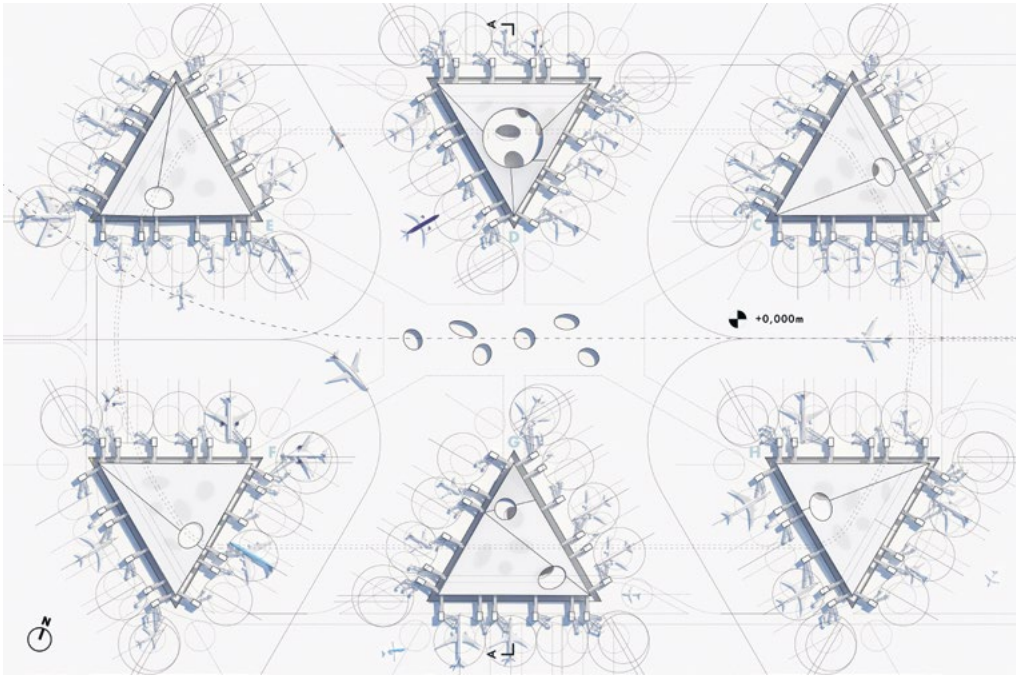


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lish the young partners firm, which has become one of the biggest practices in Germany. The special feature of the design was the hexagonal layout of the facility. Von Gerkan's implementation of the Lufthansa propagated drive-in concept [→AUTOMOBILE] made circu-

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lation more efficient. The design also very impressively transcribes the floor plan of the hexagon into the elevated building, which integrates check-in, hotel, and tower. The complex rises above the lowlands as a widely visible emblem of a mobility made possible by technological progress. That same year, Hans-Joachim Witt also conceptualized a terminal with docks for the aircrafts on all sides. Here, the basic form is a square covered by a self-support-

ing space framework [→STRUCTURE]. With a particular sense for the possibilities of collage, Witt understands how to envision the technical promise in perspectives as a generous, lucid impression of spaciousness [→USE].

Meinhard von Gerkan was appointed to TU Braunschweig in 1973 as a Professor of Design and Building Theory. The first project he gives as a Diploma assignment is again an airport terminal. From hereon in, this building type is part of the Braunschweig Diploma assignment repertoire.

Klaus Lenz' *Major Airport Berlin* introduces further development of the ring-shaped circulation model, which he conceptualized in 1990 against the backdrop of German reunification. The circular structure is spanned by a bridge, which facilitates accessibility to ground traffic. The technophilia of the sixties has given way to more cautious tones: there are no longer usable areas inside the ring, but instead a green space.

A major airport for the capital has indeed been under construction for 14 years. According to expert calculations, the facility designed by gmp – the architectural practice co-founded by von Gerkan – will not be sufficient for the anticipated volume of passengers, even in times of increasing flight shaming. Stefan Tuchen addresses this situation as a central challenge in his 2018 Master's thesis *Final Call: BER Terminal 2*. In an analytical and logistical feat, he develops a modular expansion concept, which combines aesthetic consistency with seamless process flows in all stages of expansion.

The designs from Sebastian Kaus and Christoph Peetz appear like a techno-utopian reaction to the sustainability discourse. In his 2010 *esec – european space exploration center*, Kaus plans an astronaut school with a visitor center whose interior slurs the vertical and horizontal spatial constraints to get visitors and space travelers-to-be ready for the zero gravity of space travel. In 2014, Peetz designs a *European Spaceport* where tourists will one day be able to launch into the expanses of the cosmos. That this strikes us as pure fiction is due to the fact that – unlike in the sixties – this time aeronautics is limping behind architectural fantasy.

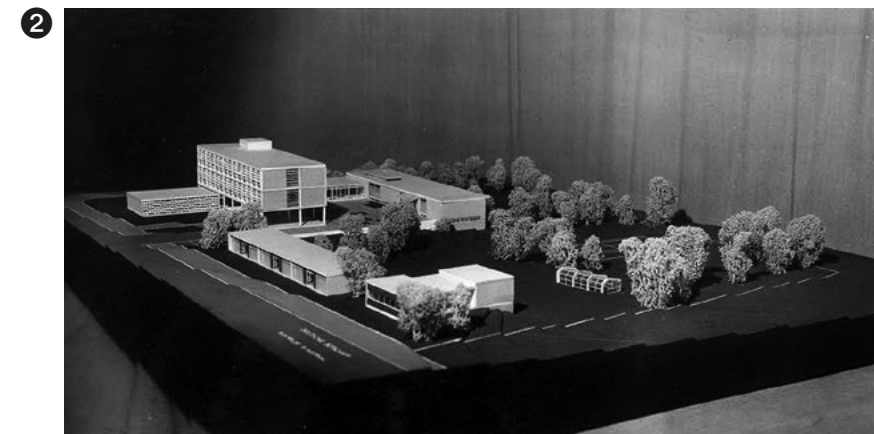
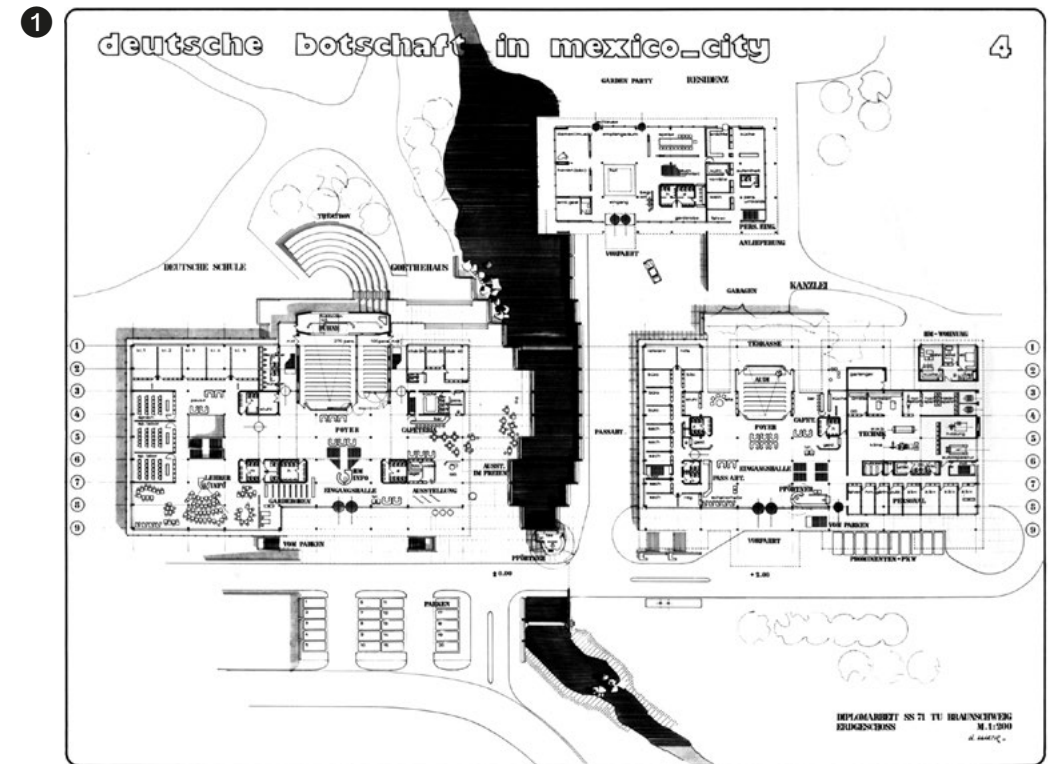
By contrast, Maximilian Ludwig's *Forms for Processes* (2019), the starting point for an unorthodox, if not wholly realistic design of the terminal, is the climate catastrophe. The design of the hall is able to respond to successively changing security and comfort standards and even retrofit its space for other – e.g. cultural purposes – should air traffic on "Spaceship Earth" diminish or even grind to a halt [→DEPARTURE].

- 1 Ünal Agartir, German Embassy in Mexico City, 1971, Prof. Oesterlen, site plan
- 2 Wolfgang Westphal, Deutsche Botschaft in den Tropen (german embassy in the tropics), 1955, Prof. Kraemer, model
- 3 Hanns Steinbacher, Einfachhaus in Indonesien (basic home in Indonesia), 1988, Prof. Guldager, bird's eyes view (detail)
- 4 Titus Bernhard, Kunst Kommerz Köln (Art Commerce Cologne), 1991, Prof. Wagner, section
- 5 Peter Ruge, Olympiade 2004 in Hamburg, 1988, Prof. Stracke, site plan
- 6 Victoria Strel, Minha Casa Minha Vida. Rethinking Social Housing in Brasil, 2019, Prof. Brederlau, courtyard of a townhouse

It is similarly difficult to date the start of globalization as it is to determine the duration of the so-called Anthropocene. At any rate, the discourse on globalization has not only gained considerable depth but also, and especially, breadth. And this also shows up in the final assignment topics for the architecture department in Braunschweig. The fact that States, even if they have bid farewell to colonial and terrorist superpower fantasies, must take a stance on global relationships is becoming increasingly certain even for a post-WWII-Germany.

It is precisely the advancing decolonization in the middle of the last century that allowed the world to once again become more fragmented from the perspective of the powerful. Independent States emerged and the likewise young Federal Republic of Germany established a number of new embassies. The Diploma designs by Wolfgang Westphal (*German Embassy in the Tropics*, 1955) and Ünal Agartir (*German Embassy in Mexico City*, 1971) reveal how designing embassies offers an opportunity to showcase one's self-perception as a democratic state [→DEPARTURE].

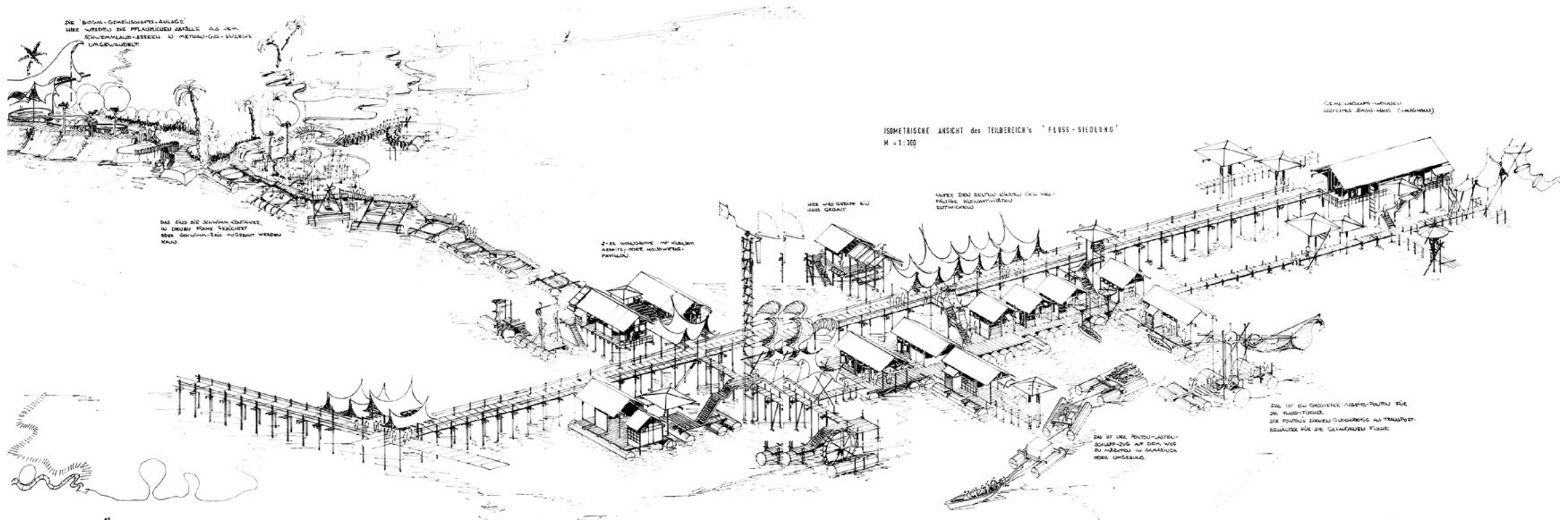
Globalization of course also evidences itself at home. Thus, in the nineties, in addition to architectural designs for the new federal States of unified Germany, there are also Diploma assignments in Braunschweig to prepare German cities for the global



competition for business. In addition to Peter Ruge and Jan-Peter Witte's plans for a Hamburg under the banner of the 2004 Olympics (1988, →OLYMPIA), Titus Bernhard's *Art Commerce Cologne* (1991), which was intended to create an international stage in the Rhine metropolis for the globally expanding art market, should also be mentioned here.

China's rapid economic boom in the 1990s was another topic for Braunschweig Diploma assignments relatively early on. As an example, we show Frank-Nikolaus Rickert's giant urban development facility for the greater metropolis area of Shanghai

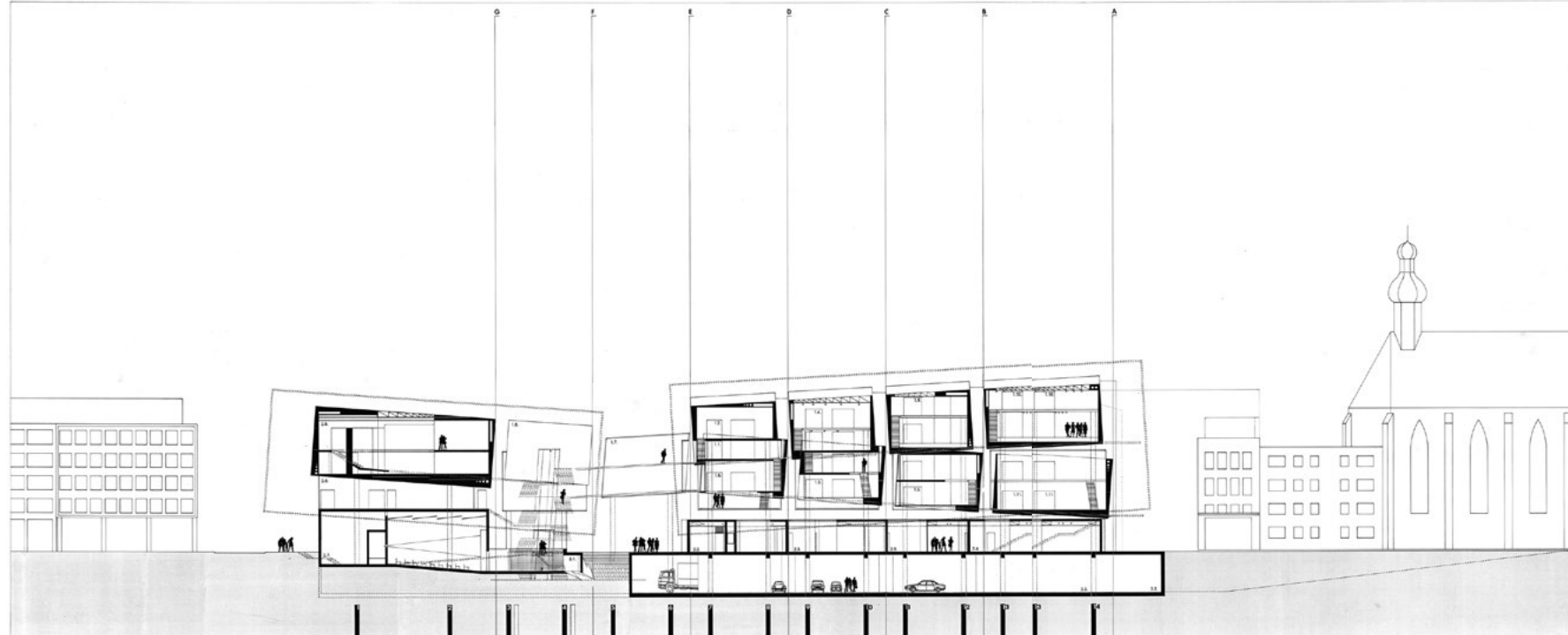
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LÄNGSSCHNITT / LONGITUDINAL SECTION

SCALE 1/100



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(2002), in which a city hovering horizontally over water is enclosed by a dominant vertical: a fusion of the metabolist city and the plug-in city [→MEGA] whose expressive construction aims to invoke the image of a dragon gate and in so doing update a traditional Chinese symbol for the current dynamic transformation.

Gradually, critical questions regarding the complicity of architecture and urban planning in a vulnerable and unfair world push into the focus of the Braunschweig final theses and, with them, proposals for alternative modes of action for a planet with increasingly perceptible limits, which architects can adopt and develop further. Thus Hanns Steinbacher developed a *Basic Home in Indonesia*, which can be self-assembled from vernacular elements, for his Diploma under Reinhardt Guldager in 1988. Already in 1973, Guldager had received the first professorship for development planning and human settlements in Germany and worked explicitly ever since on sustainability, local building traditions, and rural alternatives in his department [→EUTOPOS].

Four decades later, the focus on socially and ecologically just planning for the so-called global south has clearly shifted to the megalopolis. In 2019, Victoria Strel is concerned with strategies for Rio de Janeiro's Porto Maravilha in *Minha Casa Minha Vida*. She suggests a qualitative and quantitative redensification while at the same time maintaining a central quarter for a low income populace. In that same year, Tjark Gall explores *Mental + Material Manifestations of Spatial Injustice* using the Ugandan capital of Kampala as an example. He presents his case study in comparison to general developments in cities in sub-Saharan Africa – incidentally, one of the few final theses to date in Braunschweig, which does not present a design but is laid out empirically and theoretically [→TENSION].

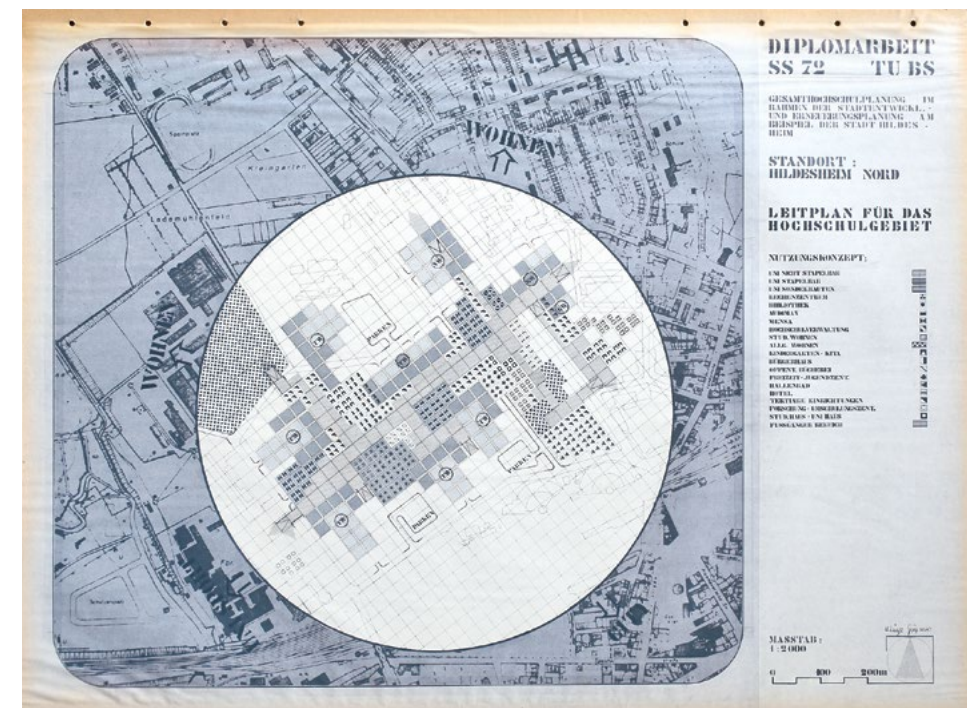
GRID

- 1 Müge Güçsav, Polytechnic University as Part of the Urban Development and Renewal Planning Based on the Example of the City of Hildesheim, 1972, Prof. Bruckmann, circulation concept and masterplan
- 2 Jürgen Zirfaß, Museum of Natural History in Lüneburg, 1973, Prof. Oesterlen, floor plan (2nd)
- 3 Renate Müller, Stadthalle (civic center) Vlotho, 1974, Prof. Oesterlen, floor plan
- 4 Hartmut Jentzsch, Schloßpark Braunschweig, 1972, Prof. Ostertag, floorplan (detail)
- 5 Ernst-Detlef Kohl, Münster Gievenbeck Housing Development, 1965, Prof. Jensen, site plan (detail)
- 6 Reinhard Hoffmann, Alternative Living in Rural Spaces, 1978, Prof. Guldager, floor plan (detail)
- 7 Gerlinde Hube, Thermal Baths, 1983, Prof. Auer, elevation

Minds diverge on the grid. For one it's a corset. For the other potential. The grid is primarily a design framework that we now chiefly associate with architecture from the 1970s: serial order, modularity, directional neutrality, and potential endlessness shaped the design to a special degree back then. As if to confirm this impression, the grid makes a special appearance in the plan diagrams of Braunschweig graduates. Especially during this decade – which is not to say that regular measuring and axis systems did not always inform architecture in expression and construction.

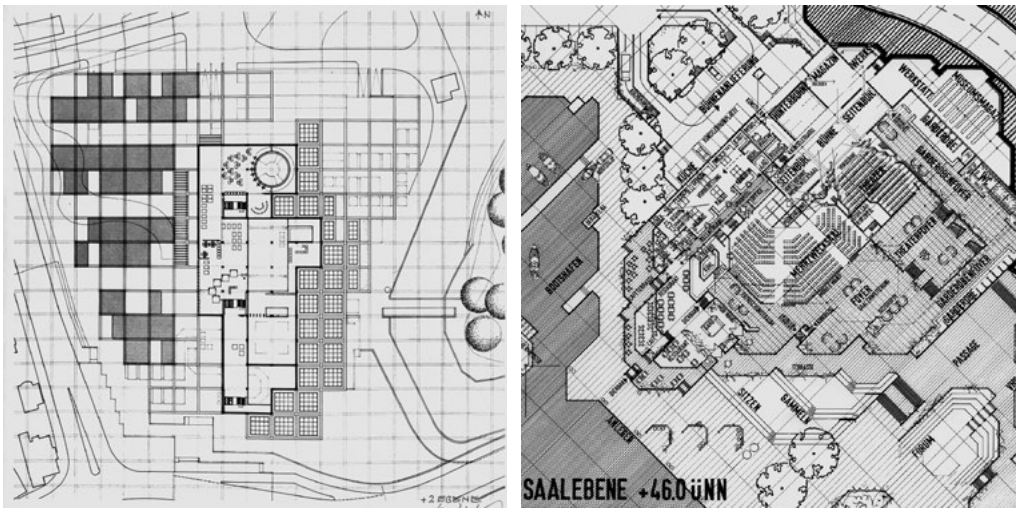
Jürgen Zirfaß makes the grid his own in 1973 in order to integrate the intended mutability and expandability of his *Museum of Natural History* in Lüneburg into the design from the ground up. In Dietmar Brandenburger's 1970 *Cultural Center for a City in the Mediterranean*, the neutrality of the grid facilitates a building landscape, which spreads out evenly in all directions – and opens up complete freedom of movement to visitors. Finally, Frank-Nikolaus Rickert also once again constructs his vertical reinterpretation of a *Plug-in City* based on the flexible modularity of the grid in 2002 [→MEGA].

Renate Müller, on the other hand, shows how the grid can be developed from existing urban planning references and, as such, must by no means be an exclusively self-referential design framework, as is often claimed. Instead, it unites industrial pro-

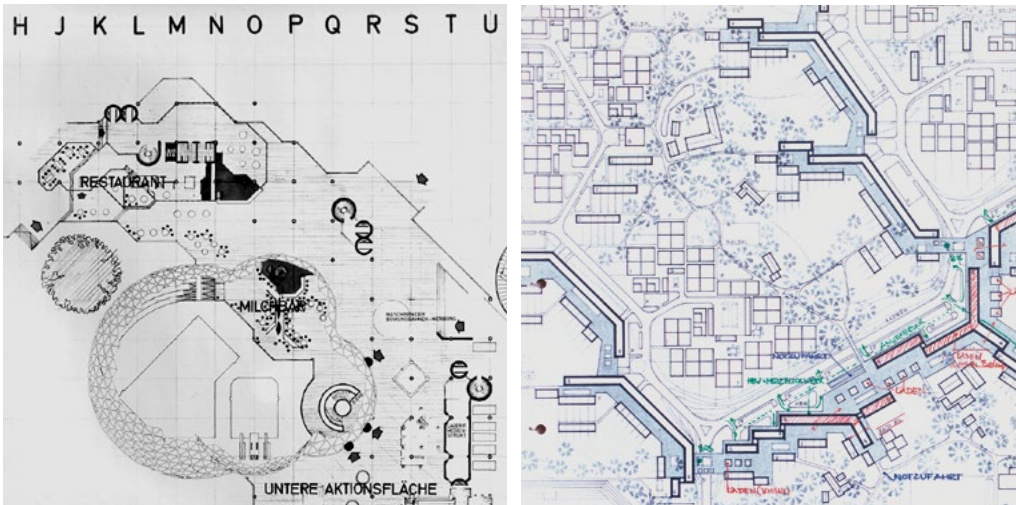


duction with scenic vastness on the basis of clear structures. The universal claim of the grid's ability to react to local needs always and everywhere is substantiated by the fact that the right angle can sometimes recede for the benefit of the diagonal.

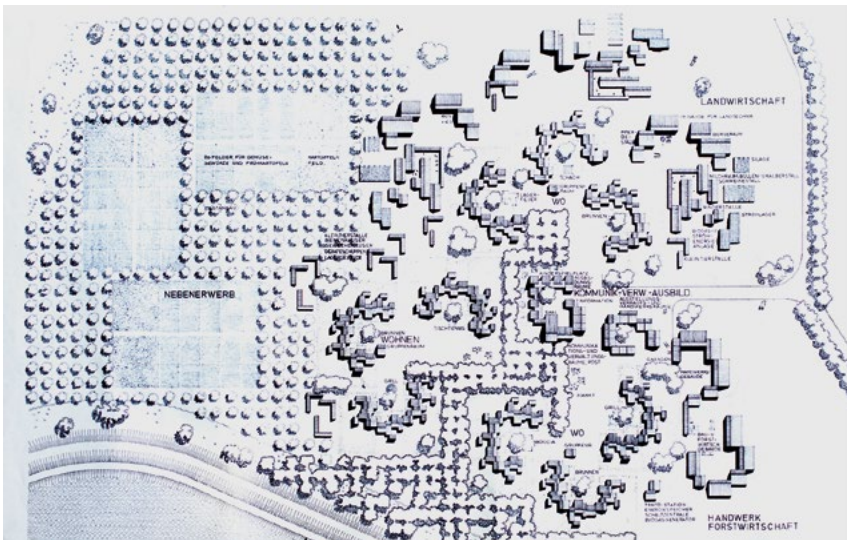
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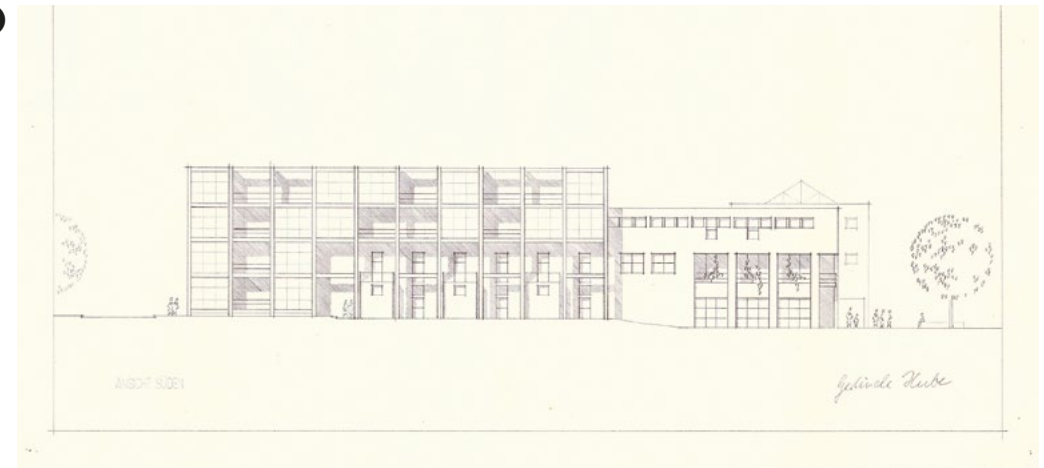
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Consequently, the grid primarily proves itself conceptually as a cartographic graticule, which facilitates the conceiving of space and the conclusive organization of references. In Müge Güçsav's 1972 drafted *Polytechnic University as Part of the Urban Development and Renewal Planning Based on the Example of the City of Hildesheim*, this is just as evident as in Ernst Detlef Kohl's 1965 *Münster Gievenbeck Housing Development* – back then without explicitly displaying the grid in the graphic of the plan [→OVERSPILL TOWN]. The assumption that the grid coincides with the inhospitableness of standardized mass production is rebutted by the works of Hartmut Jentzsch and Reinhard Hoffmann, in which attempts at creating counterspaces for Braunschweig's center or for *Alternative Living in Rural Spaces* [→EUTOPOS] are almost naturally conceived by the spirit of orientation and measuring grids.

What remains of the gridded days is the constructive efficiency, which it tried to facilitate through series and module. Ulrich Decker already dismantled the organizational inflexibility of the grid in 1979 without dispensing of its advantages for statics and the construction process: in his *Kulturforum at Römerberg Frankfurt* he twists the direction of the organizing support system based on the needs of the individual building components [→BLOCK].

For Waltraud Witt (1974) and Gerlinde Hube (1983), the grid at last materializes primarily in the facade. What Witt develops as a formal continuation of the structure of the floor plan, Hube turns into a proposition to engage in dialogue with the viewer about the aesthetic qualities of the square.

- ① Eckhard Gerber, Kirchliches Gemeindezentrum und Altenheim (church community center and retirement home), 1966, Prof. Kraemer, model
- ② Rüdiger Vermehren, Modell für ein Freizeitzentrum (model for a leisure center), 1970, Prof. Jelpke, section
- ③ Manfred Kirchhoff, Residential and Social Center for Youth in Braunschweig, 1978, Prof. Wagner, model
- ④ Maren Lauer, Treffpunkt (meeting point at) Schloßpark, 1967, Prof. Oesterlen, floor plan ground floor
- ⑤ Markus Willeke, Gebrüder Grimm Museum (Brothers Grimm Museum), 2010, Prof. Penkhues, perspective view of interior

“Around the hearth the first groups assembled; around it the first alliances formed; around it the first rude religious concepts were put into the customs of a cult.” It forms that “sacred focus around which took order and shape” (Gottfried Semper).

It was Semper’s notion of the origin of architecture, which prompted us to select the metaphor of the hearth for the following works being presented. With this term, he describes the fireplace as a theoretical point of origin of any community-establishing assembly, which allows architecture to emerge as the spatial-material organizing principle of the social world. Semper’s “hearth”, formulated for an archaic society, is recognizable in varied and differentiated forms in our current society in plenty of cultural and leisure sites.

The oldest Diploma design in our index, Helga Herrenberger’s *Marionette Theater at Löwenwall* from 1948, references the special significance of the foyer as a space, which invites you to linger. Before the start of the performance, in the breaks, or perhaps even afterwards, the visitors engage in conversation here. Manfred Kirchhoff’s *Residential and Social Center for Youth* from 1978 offers in its basement a large foyer area as a meeting spot and forum which forms his design’s centerpiece. Here, individuals become a community, living with rather than next to one another.

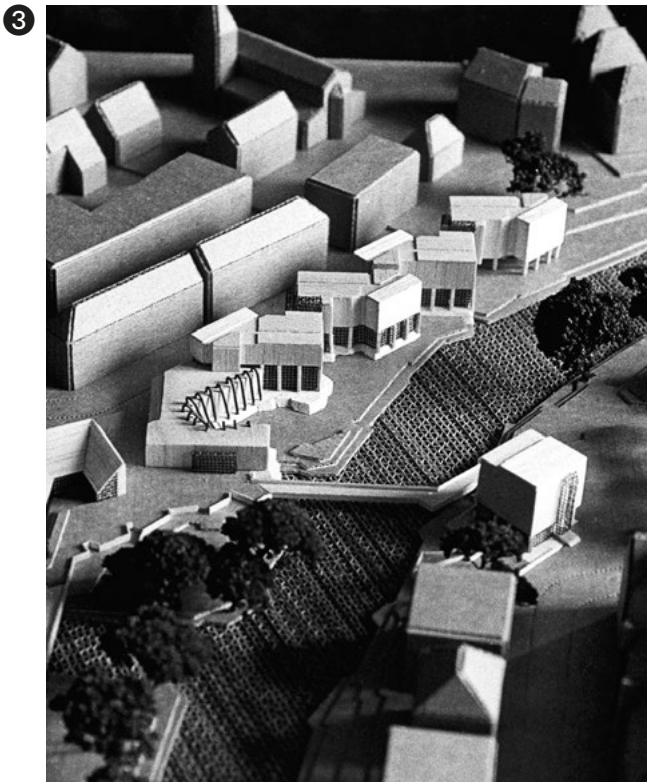
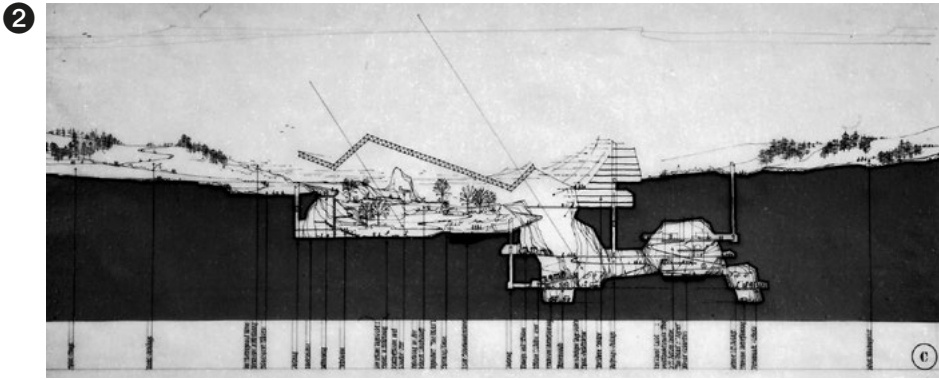
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The design for a *Turkish Cultural Center in Berlin* by Manfred Bukowski (1980) also offers a space for community-building activities. Mosque, theater, exhibition spaces, and pergolas permit both religious as well as cultural uses and also acknowledge the significance of everyday encounters in the building [→JAUNT]. The experience of a cross-generational community, one of care and ‘being there for each other’ is displayed in Eckhard Gerber’s design for a *Church Community Center and Retirement Home* (1966) for which the author positioned a daycare center, nursery school, and senior home in direct contact with the community center.

In 1967, Maren Lauer designs a generously unfolding terraced *Meeting Point at Schloßpark*, while Rüdiger Vermehren virtually digs an underground city into the earth for his model for a leisure center three years later [→MEGA].

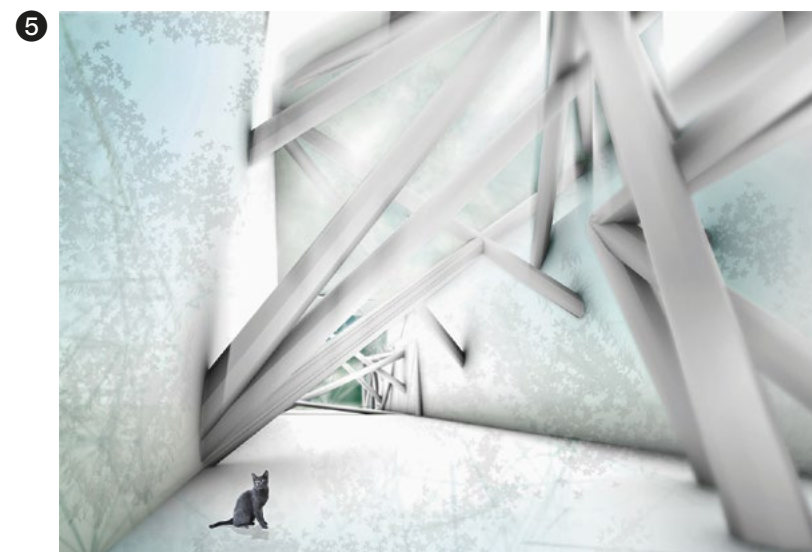
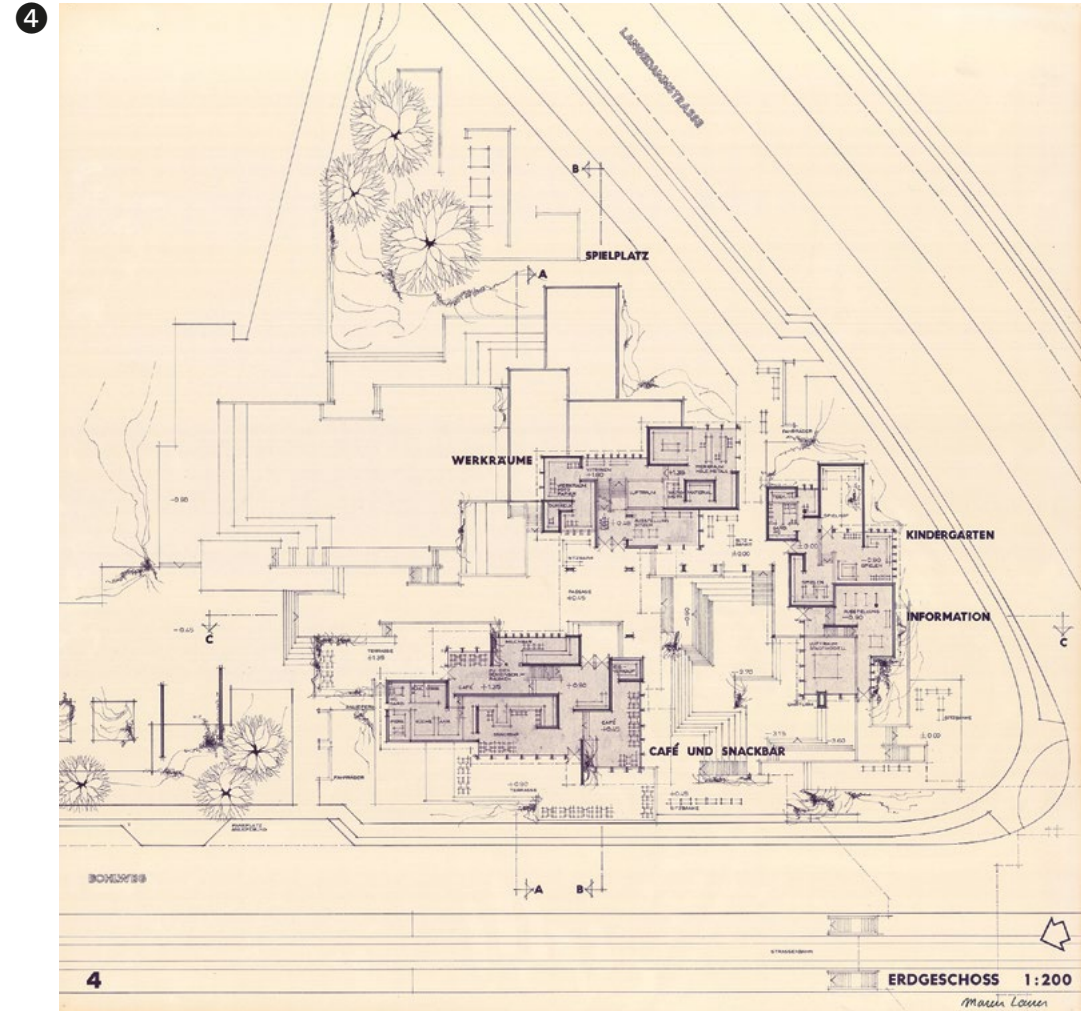
For numerous generations, the cinema was also a special hearth of social gathering for a fleeting magical moment. The demise of that era was miraculously halted by Hans-Hermann Krafft for a brief period with his *Cine Città* in 1989. Museums dedicated to the recounting of tales and commemoration of collectivity have boomed as assignments for Diploma and Masters theses for years – for example, in Markus Willeke’s *Brothers Grimm Museum* from 2010, which is moreover under the roof of a fairytale forest of pillars.



Last but not least, the building type thermal bath emerges as a special place for community-establishing assembly. Issued as a Diploma topic in 1983 by Gerhard Auer, people congregate as per the assignment “to stroll, play, read”, relax together “in a calm bathing atmosphere”, and talk about news and everyday life, world politics, and the domestic hearth in Annegret Droste, Michael Drewitz, and Gerlinde Hube’s designs [→LAB COAT].

FURTHER READING

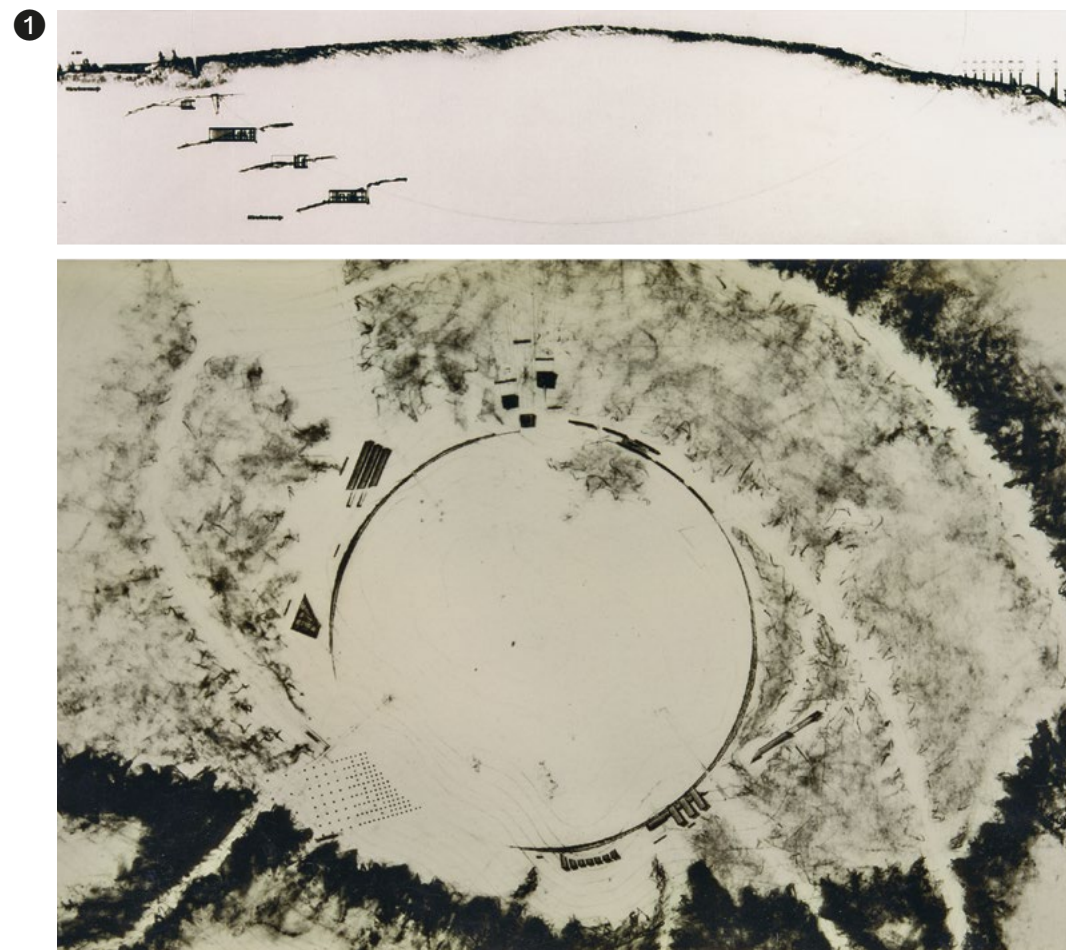
Semper, Gottfried: Die vier Elemente der Baukunst. Beitrag zur vergleichenden Baukunde (The Four Elements of Architecture. A Contribution to the Comparative Science of Architecture), Braunschweig 1851.



- ① Sabine Mehrgardt, Brocken-Kopf (crown of the Brocken mountain), 1992, Prof. Auer, topography and plan of site
- ② Gabriele Gropp, Expedition Station Grand Canyon, 1983, Prof. von Gerkan, elevation from the north
- ③ Susanne Dexling, Vertical Passage on Heligoland, 1986, Prof. Wagner, model
- ④ Diana Bico, Agoraphobia Istanbul, 2014, Prof. Kiefer, collage

Architectural gestures call on us to pass through their spatial formations, to wander about and explore them, even if we only do so in our imagination [→JAUNT]. Sometimes these gestures point notably beyond the spatially concrete: to the absent or that which does not yet exist. This architecture, directed at the imagination, has been an important topic in Braunschweig since the eighties, which might very well be connected to the revaluation of landscape architecture within the sphere of disciplines. This chair is permanently staffed in 1982 by Hinnerk Wehberg, and from 1991 it is also possible to obtain a Diploma here. Since 2002, the Institute for Landscape Architecture has been headed by Gabriele Kiefer [→CURRICULUM]. However, the designs we will show here under the keyword “horizon” are in no way limited to the chair for open space and landscape design since they are indeed concerned expanding horizons.

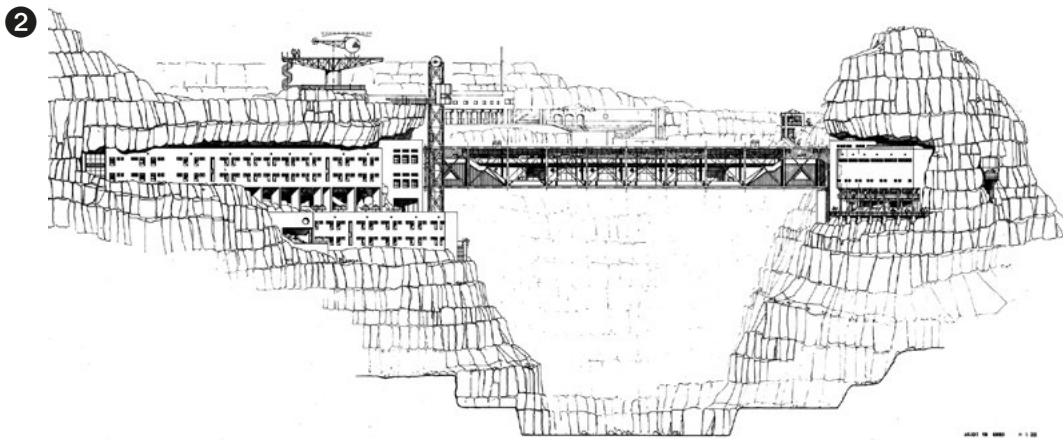
“When the only slightly curved peak of the Brocken calls to mind the earth’s curvature, when its stony barrenness appears like an emergence of remembrance, when the mythical past of the Brocken calls forth extraordinary associations in every hiker just as the adventures of ascent experienced today, then this all justifies the radical staging of the ‘emptiness’” (Sabine Mehrgardt, *Brocken-Kopf*, Diploma 1992).



The *Expedition Station Grand Canyon* by Gabriele Gropp (1983) elevates the genius loci of a landscape, which is hostile to human life but which ignites fantasy like no other. The design translates the plunging, rising, stretching of the topography into the language of architecture. An amphitheater for the spectacle of light, a house that stretches itself on pilotis and is also a cave, a bridge whose theme is the abyss – all result in a design, which unites the archaic with the high-tech and assertively contrasts the overwhelming setting.

Susanne Dexling’s design (1986) for a *Vertical Passage on Heligoland* also works with natural formation and contrasts it with *téchne*, fusing these two signatures of landscape into a walkable monument, which is also an abbreviation of the city with its department store, museum and hotel functions [→MEGA]. The poetic effect of the delicate steel framework can be imagined in an exceedingly delicately-shaped model.

In contrast to these designs, which act starkly with the dramatic natural scenery, the designs of Rüdiger Stauth (a dissertation,



whose centerpiece is the design of an urban planning history museum trail for Braunschweig, 1991) and Astrid Bornheim (*Monument Landscape Peenemünde*, 1998) open up a topography of cultural remembrance induced by movement [→USE].

Katharina Specht's (2013) thesis *Marschordnungen* (march formations) also fits into this context. On the basis of extensive (building) history research and site exploration, she develops among other things a concept of artistic interventions to make the Nürnberg Nazi Party rally grounds tangible as an architectural matrix for the performative spectacle of Nazi propaganda.



Finally, Diana Bico (*Agoraphobia*, 2014) transforms a highly contested political space, the Gezi Park in Istanbul, into an island far removed from the city. By releasing the location from the grasp of conflicting demands from societal groups, which it can not all simultaneously fulfill, a “poetic transformation” (Baudrillard) into the realm of the collective fantasy occurs and becomes a symbol of participation.

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Conrads, Ulrich: *Landschaften vor Augen (Landscapes Before Our Eyes)*, in: *Daidalos*, 1984, 12, pgs. 32–43.

Jäkel, Angelika: *Gestik des Raumes. Zur leiblichen Kommunikation zwischen Benutzer und Raum in der Architektur (Gestures of Space. On the Physical Communication Between User and Space in Architecture)*, Tübingen 2013.

INDUSTRY

- 1 Uwe Holler, Administration Building with Occupational Medical Service and Cafeteria, 1965, Prof. Henn, perspective view
- 2 Stefan Worbes, Bicycle Factory in Braunschweig, 1988, Prof. Schultz, elevation
- 3 Osman Kapici, Bergbaumuseum (mining museum) in Goslar, 1982, Prof. Wagner, elevation from the north
- 4 Rüdiger Stauth, Rockpalast, 1983, Prof. Wagner, axonometric view
- 5 Nora Charlotte Delille, Zentrum für Schiffbau (shipbuilding center) Antwerpen, 2017, Prof. Staab, section
- 6 Nicolai Schlapps, The Factory. Urban Sprout, 2013, Prof. Grüntuch-Ernst, bird's eye view

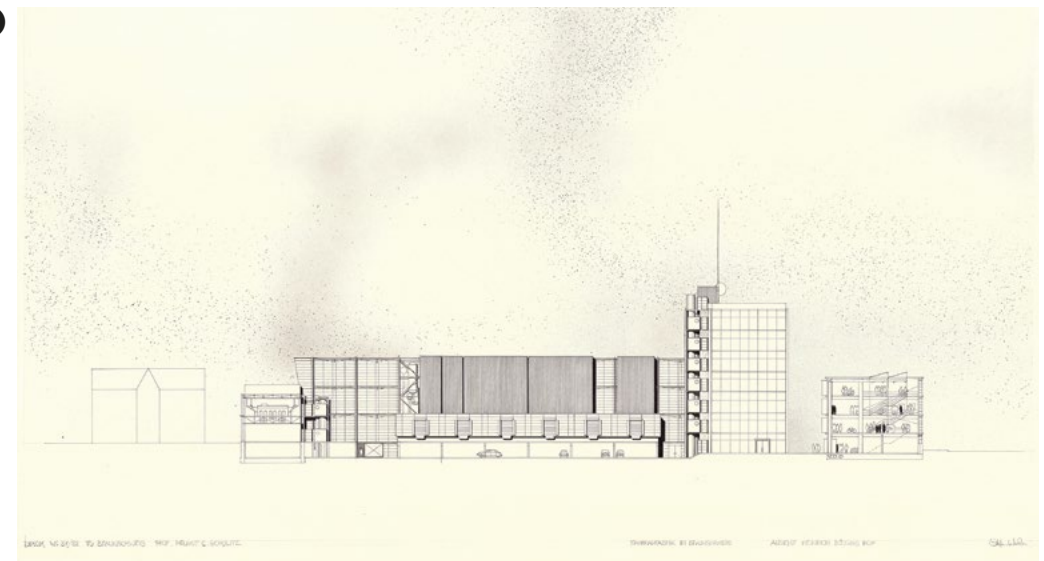
Through the work of Walter Henn, who was appointed to the TH Braunschweig in 1953, the Braunschweig School of Architecture is associated with a unique quality of industrial construction in West Germany. His research and teachings found their way into textbooks on industrial and steel construction, which are considered classics in the field and have been translated into numerous languages. The Chair successors Helmut C. Schultz (since 1982) and Carsten Roth (since 2003) have managed to perpetuate this renown.

Comparatively speaking however, trade and industry have been an astoundingly less prominent Diploma assignment – the numbers are behind those of structures for popular sports, for example [→OLYMPIA]. In the oldest Diploma of this section – Uwe Holler's *Administration Building with Occupational Medical Service and Cafeteria* in the context of an engineering factory (1965) – it is not the production facilities themselves in the foreground of the design but rather the workplace as a distinction of social spheres. By contrast, sophisticated architecture for production facilities, which are not primarily labs or “showrooms”, is seldom a subject in later years. And when it is, it is in the area of light industry typical for Germany: like Stefan Worbes' *Bicycle Factory in Braunschweig* (1988) or Anke Westphal's *Clock Factory in Celle* (1993).

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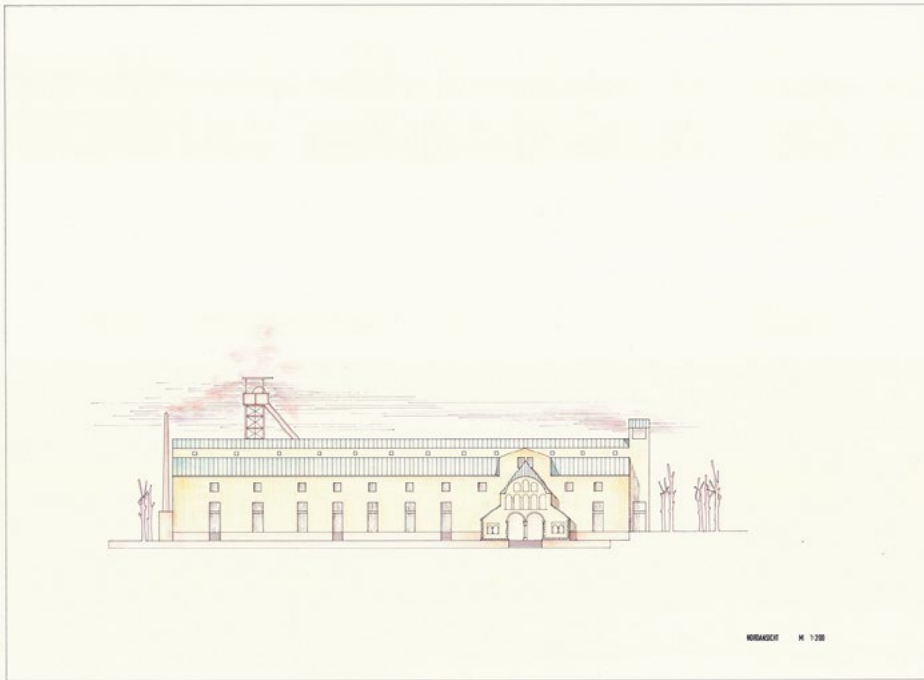
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The structural transformation from heavy industry to service society was a tangible issue in Germany at all cultural levels in the 1970s. This was also the case for architecture. In 1978, Heiner Höltje designs an (Art) Museum in the industrial region of Lille-Roubaix under Manfred Lehmbruck. Still very much in the spirit of the ‘machine age’ in its construction and individual forms, the expressive overall composition already contradicts the rational artifact that the environment had become. The limits of industry culture and high culture begin to become permeable.

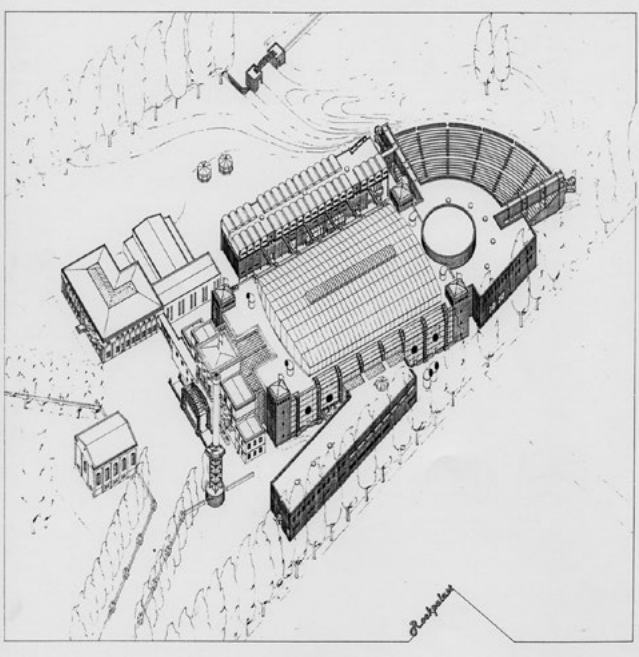
Just a few years later, the ‘dirty realism’ of industrial work is already being aestheticized and memorialized – e.g. through Osman Kapici's *Mining Museum* in Goslar (1982) in a wholly changed

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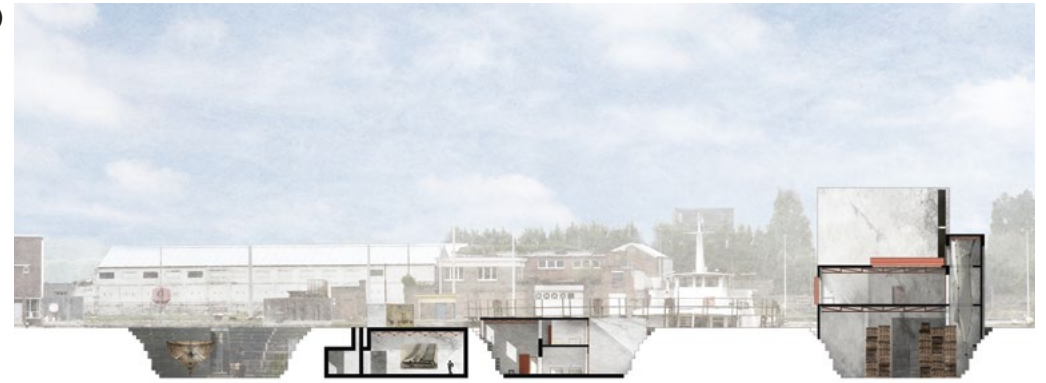
BERGBAUMUSEUM IN GOSLAR
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© 1982

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manner of presentation [→LAB COAT] compared to the Braunschweig plans of the seventies. Or Rüdiger Stauth's transformation of a factory building from the 19th century into a venue for rock music

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(1983), a prototype of the conversion architecture that has now been in vogue for decades in the former industrialized countries.

On the topic of conversion we would like to add four more recent works in which the preservation of the structure, however, is not the main concern: the *Ruhr.City.Lab* (2008) by Olaf Härtel, the *Ateliers de la Méditerranée* by Oliver Thar (2011) at the industrial port of Marseille, and Nicolai Schlapps' *The Factory. Urban Sprout* (2013) in the Brooklyn Navy Yards inject the impulse of urban life in areas with an industrial-periphery character through distinctive contemporary architecture. By contrast, Nora Charlotte Delille's *Shipbuilding Center* in Antwerp (2017) focuses on moments of continuity within the world of labor during a period of structural change by shifting the focal point to the accumulation and advancement of know-how in the vestiges of abandoned primary production.

- 1 Diethelm Hoffmann, Braunschweig University of Art, 1963, Prof. Oesterlen, perspective view of the interior
- 2 Lutz Käferhaus, Kurhaus eines Badeortes (spa house at a bathing resort), 1967, Prof. Kraemer, section
- 3 Robert Friedrichs, Collegium Musicum, 2001, Prof. von Gerkan, perspective view of the interior
- 4 Karen Brand, Manhattan Transfer, 1999, Prof. Schultz, perspective view of the interior

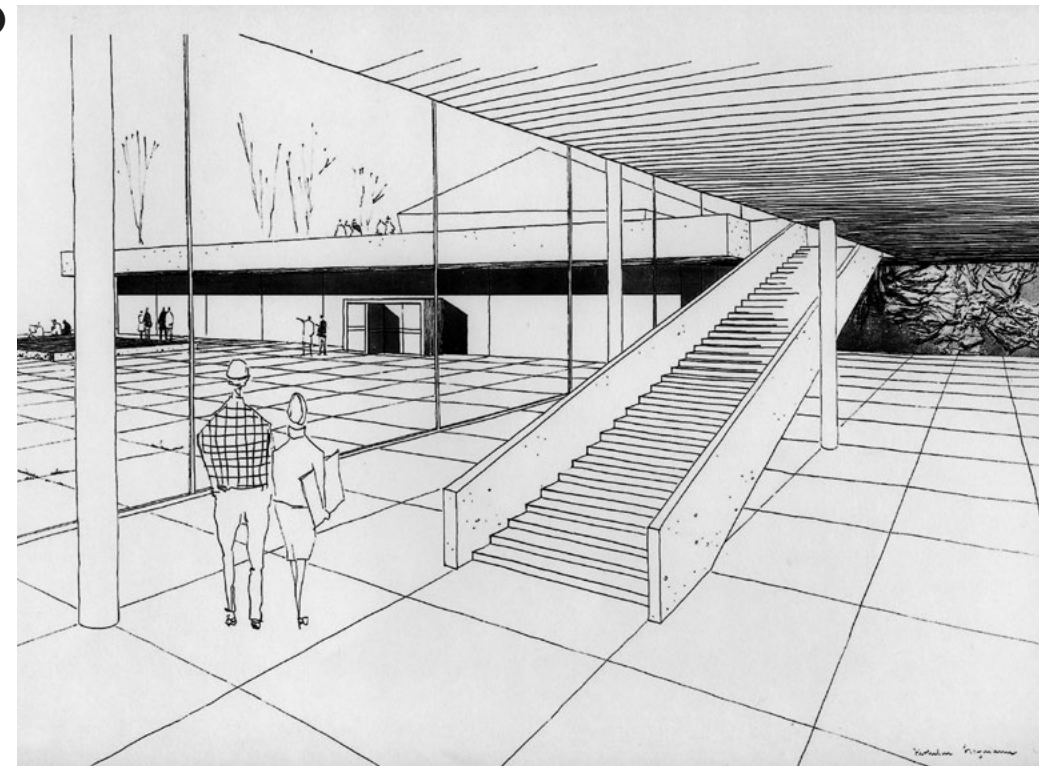
Not hustling, not rushing, no running, no hurry. Far more a pause in movement. We proceed in order to perceive our surroundings, to sense ourselves in our environment. We see and are seen. The saunterer becomes the observer conscious of being observed.

In this entry, we assemble designs, which are particularly given to staging this relationship between movement and awareness – in a detail, in a perspective, or in the declaration of the design concept.

Diethelm Hoffmann has two figures in the interior of his *Braunschweig University of Art* (1963) turn their backs on the viewer. They pause, look through the large glass facade of the entrance hall beyond. The gaze of the viewer, however, continues on. It follows the *promenade architecturale* to an upper platform with evermore new views and vistas. Robert Friedrichs also offers an architectural landscape, which unfolds as you traverse it, in the interior of his *Collegium Musicum* (2001). In Lutz Käferhaus' *Spa House at a Bathing Resort* from 1967, the staircase takes on a central social function apart from circulation in that it stages the up and down jaunting in the spa house as a social event [→HEARTH].

Simon Paulus describes the main concern of his design for his *Kulturforum Graz* (1999) as a “sensible treatment of the surrounding historical cityscape” (Paulus). His Forum offers the

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flaneur a *tableau vivant*, an arrangement “of antipodal building configurations” through which one can saunter, since haste would ruin the tableau.

Susanne Dexling designs a *Vertical Passage on Heligoland* in 1986 in the form of a constructivist, gigantic winding staircase. Between the isle's Upper Land and Lower Land, jaunting easily becomes a sports activity. And yet it continuously offers a contemplative view of the sea [→HORIZON].

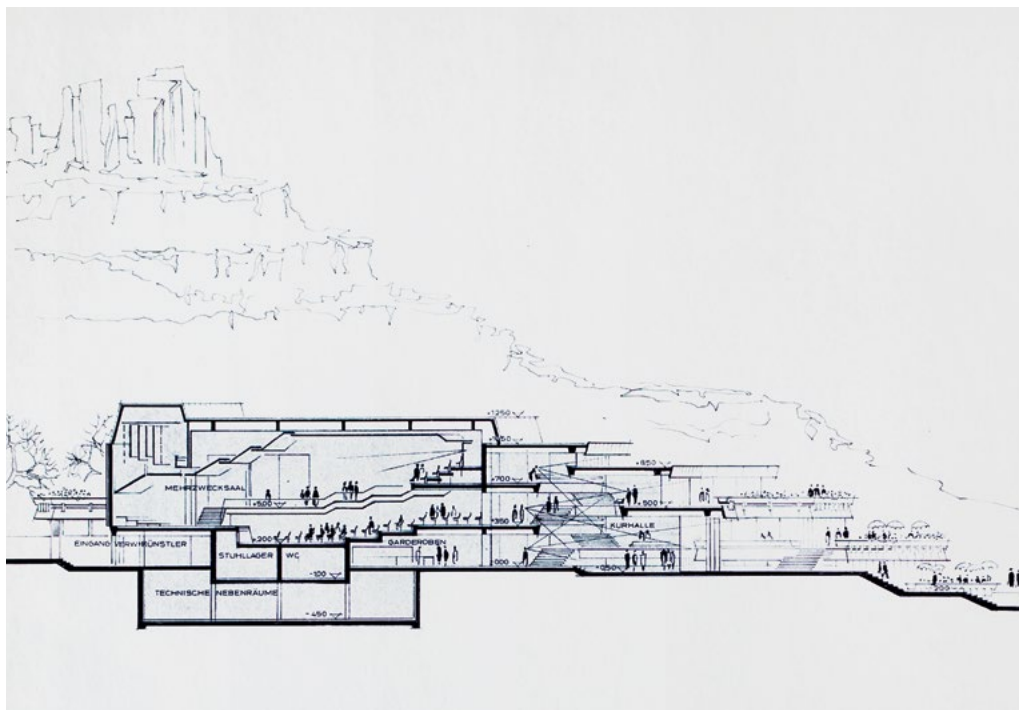
In Karen Brand's terminal building on the southern tip of Manhattan (1999), “the transition from land to water, from city to sea is staged through the diagonal intersection of the building with the glass facade to the west towards the ferry docks” [→WATERBANK].

FURTHER READING

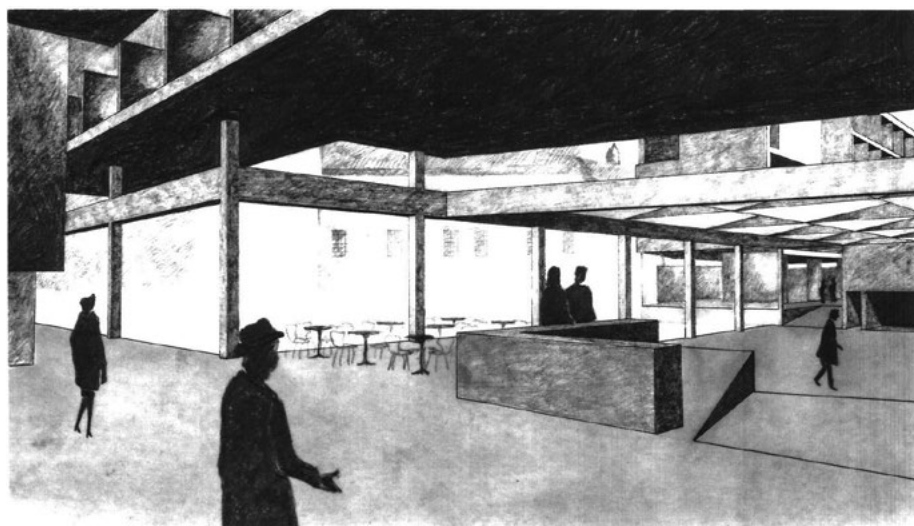
von Keitz, Kay/ Voggenreiter, Sabine (ed.): *En passant. Reisen durch urbane Räume. Perspektiven einer anderen Art der Stadtwahrnehmung* (En Passant. Traveling Through Urban Spaces. Perspectives Of A Different Kind Of City Perception), Berlin 2010.

Neumeyer, Harald: *Der Flaneur. Konzeptionen der Moderne* (The Flaneur. Conceptions of the Modern), Würzburg 1999.

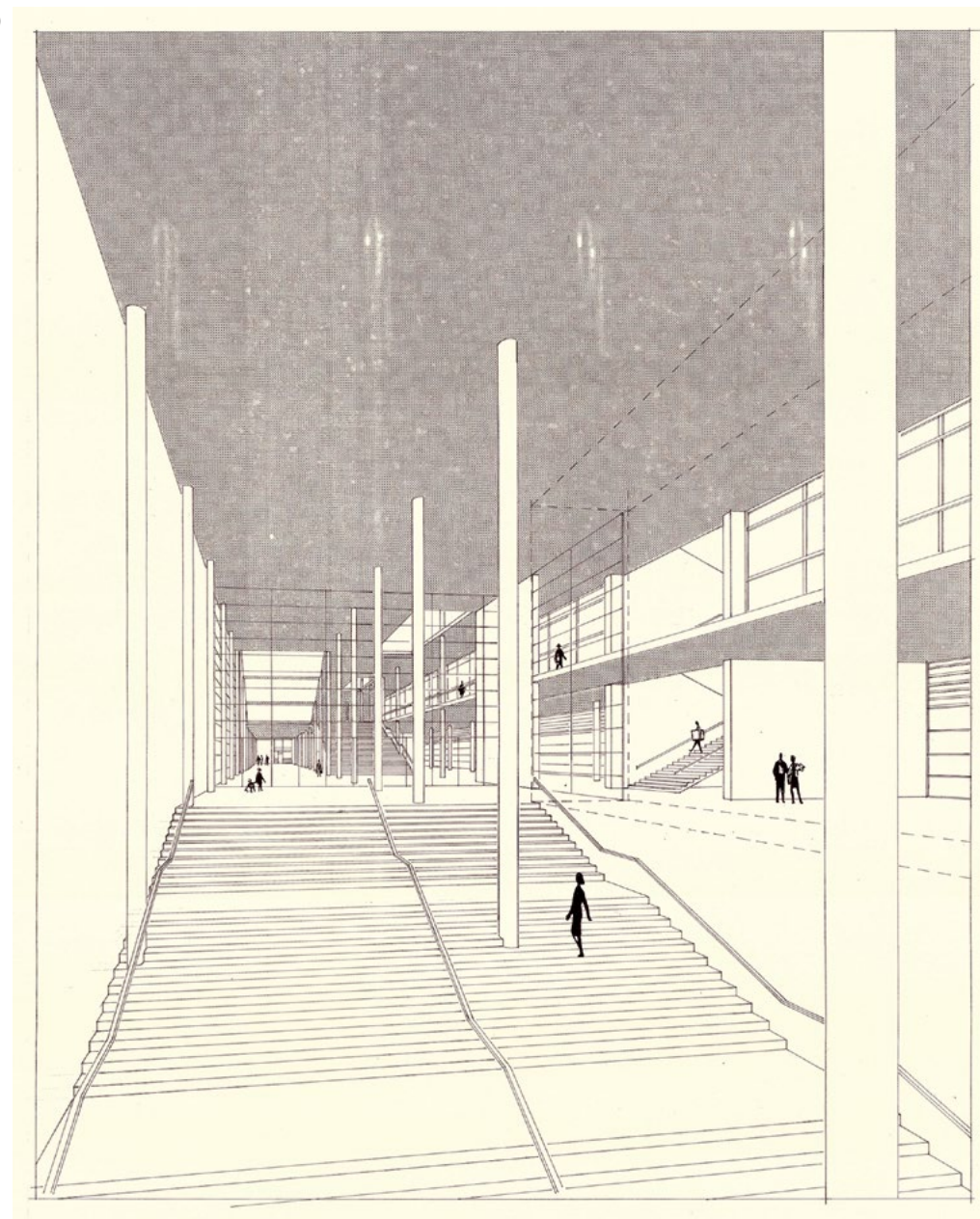
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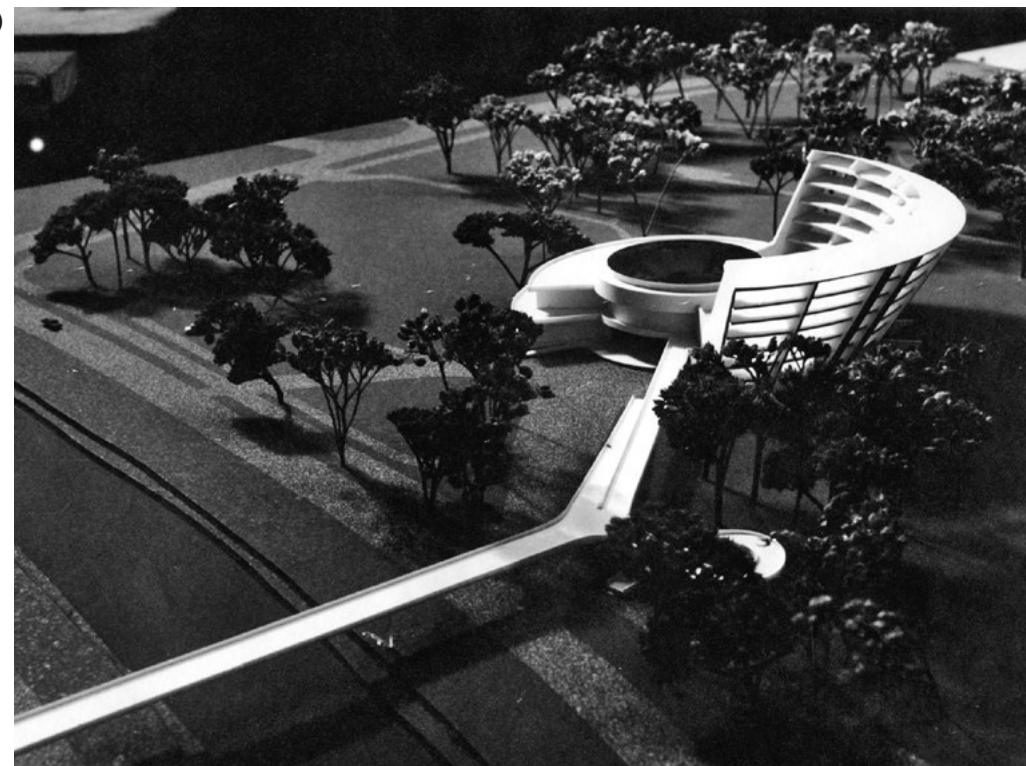


- ① Hinrich Schwanitz, Design for a State Parliament Building, 1961, Prof. Oesterlen, model (driveway in foreground)
- ② Thomas Möhlendick, Cine Città, 1989, Prof. Auer, model
- ③ Luisa Held, Olive Mount – Center for Cultures, 2014, Prof. Grüntuch-Ernst, rooftop view from the south
- ④ André Poitiers, Greenpeace Base Hamburg, 1989, Prof. Ostertag, elevation seen from Blohm & Voss shipyard

Hinrich Schwanitz' *State Parliament Building* from 1961 appears like a foreign object amid the Braunschweig designs of its time. One can assume that it is also meant as a foreign object. In the sense that it is intended to herald something new. The circular plenary hall at the core of the structure is a concentrating figure very befitting of a democratic institution [→DEMOCRACY]. In the exterior structure, however, the calm of this figure stumbles into a centrifugal dynamic. The adjoining rooms subside into distinct long curves around the core. The representatives' offices stack up like shelves in a boldly constructive overhang. An access ramp sweepingly sets the mood for the prospect of this architectural symbol. An omen – after a phase of endeavoring for cheerful, objective calm – of the stir to come in the impending decade of postwar German society [→TENSION]?

Dichotomy is also the topic of André Poitiers' design for a *Greenpeace Base* in Hamburg from 1989 [→DEMOCRACY]. The headquarters floats like a ring over the harbor site. The impression of an oil platform is suggested, but as a kind of parody appropriate to the intentions of the builder, because the effect of the construction is not intrepid in the euphoric sense but rather fragile, precarious. The impressive model iterates the dichotomy of material treatment and aesthetic through its presentation as

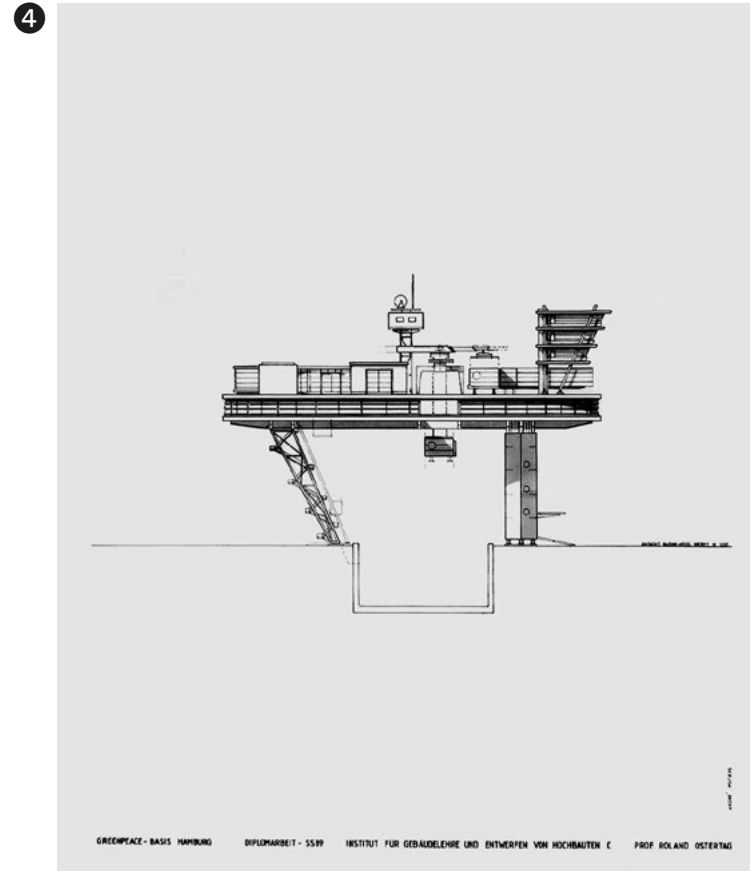
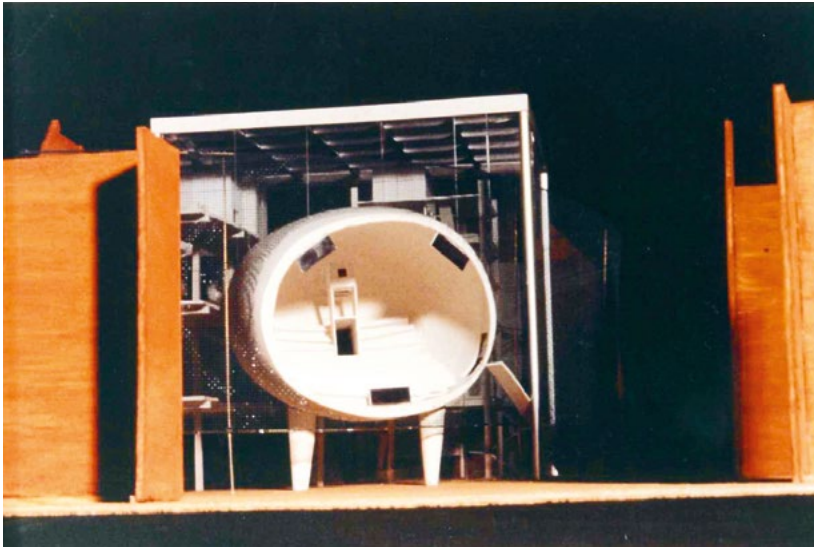
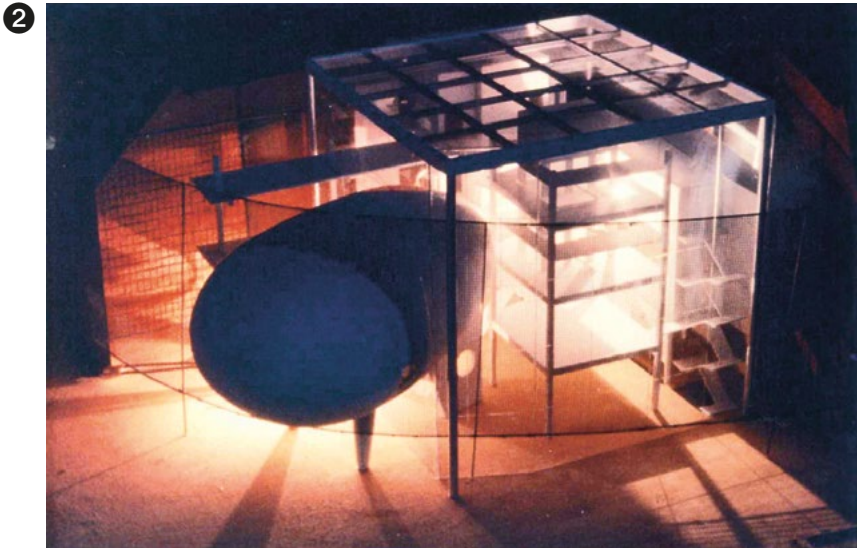
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an almost finely chiseled gold work hanging over 'solid ground' in the concrete casted surroundings of the NGO's headquarters.

Thomas Möhlendick's *Cine Città* from that same year makes striking use of the shielding of convex forms to define the corner situation between Papenstieg and Marstall at the rear side of Braunschweig's Burgplatz. The design for the cinema complex effectively contrasts a cube [→Q-BE] containing circulation with the expressively shaped cinema auditorium in its interior. It creates, as advisor Gerhard Auer comments, spatial abundance and a morphologic richness of experiential, labyrinthian impact. Is it by chance that the cinema auditorium sliced out in the model gazes out of the picture like the tree-man from Hieronymus Bosch's "Garden of Delights" – as an interface between the cinematic dreamworld and the viewer's desire?

In 2000, following the introduction of the euro as an accounting currency, Michael Szyszkowitz assigns the design of a headquarters for the *European Central Bank* [→EUROPE]. In Julius Klaffke's solution to this assignment, our current view, shaded by the euro crisis, may detect a reflectiveness that breaks with the typical sleek bank skyscraper aesthetic. As it were, our gaze seems to sink into the depths and recesses of these surfaces to once again build momentum at its serpentine folds.



Steven Hahnemann's design for a hospital structure in Innsbruck might have resulted from an investigation into the potential to optimize operation and construction (2014). However, a will to form prevails. One which, in an architectural sense, translates the diagrammatic analysis of the functional processes into the organic. The topics of circulation and expandability are shaped by the echoes of plant-like or crystalline growth. The "curve" is not the dominant form trait here. Rather, the synthesis of bionic and structural paragons achieves a distinct departure from the logic of the right angle.

Luisa Held calls her 2014 design for a pilgrim's center on Jerusalem's Mount of Olives *Olive Mount – Center of Cultures*. In a contemporary invention on circles and curves, she incorporates many features of the location – central structure, cave, light imagery, historic district sightline. She uses this to create a spatially defined 'radius' in which present and past, mythical and political space can meet. One which respects the expectations of pilgrims to Jerusalem while simultaneously wanting to facilitate an encounter with the unexpected [→HORIZON].

LAB COAT

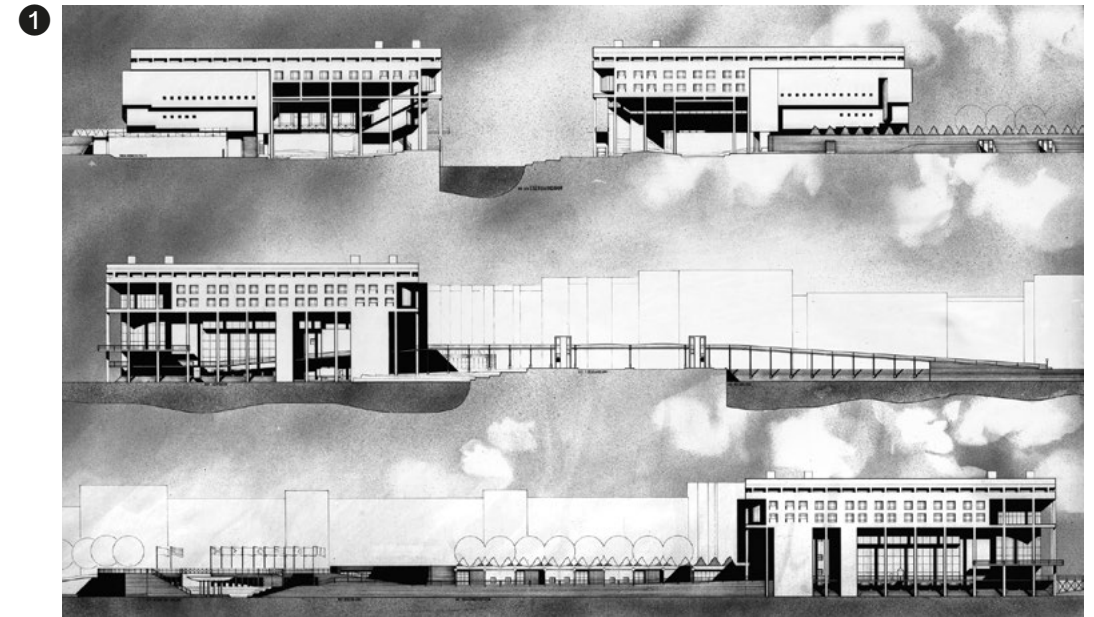
- 1 Bernhard Gössler, Conference Hotel in Kiel, 1980, Prof. Wagner, elevation and section
- 2 Michael Drewitz, Thermal Baths, 1983, Prof. Auer, cover
- 3 Rolf Blume, Domäne Helmstedt, 1981, Prof. Stracke, plan
- 4 Rolf Toyka, Goethe-Institute at Weißenhofsiedlung, 1978, Prof. Ostertag, elevation
- 5 Julian Busch, Aerotopos 2018. Center for the Innsbruck winter games, 2009, Prof. Szyszkowitz, sectional model
- 6 Simon Fischer, Pop-Up Living in Cologne, 2019, Prof. Grüntuch-Ernst, perspective view

The drawing lab coat references the craftsmanship of design portrayal. Together with arm covers and gloves, masks and stencils, the lab coat provides equal protection for the individual plan and its maker against collateral damage when ideas are put on paper. The “lab coat” directs attention to the production and materiality of the architectural drawing, but also to how production and materiality affect the observer [→USE].

Karl-Heinz Hesse’s design rendering of a sports hotel from 1965 makes us aware of the expressivity, but also the fragility of the pencil drawing: the South Tyrol mountain trees drawn with soft lead still stand before us today with their powerful stroke control – and even sixty years later, the black lead flutters from the dense fir forest when you lift the sheet [→OLYMPIA].

The 1978 plans executed by Rolf Toyka with a rapidograph very consciously stage the imperfection of freehand drawing: the lines executed with a slightly shaking hand over a preliminary sketch designed on a cord-led parallel rule in order to convey manual aesthetic to a technical drawing. Termed a “trembling line” by students at the time, this technique was considered a presentation characteristic in Roland Ostertag’s institute.

Ink is also effectively used by Bernhard Gössler (1980) and Stephan Worbes (1988). Hard, two-dimensional painted shadows

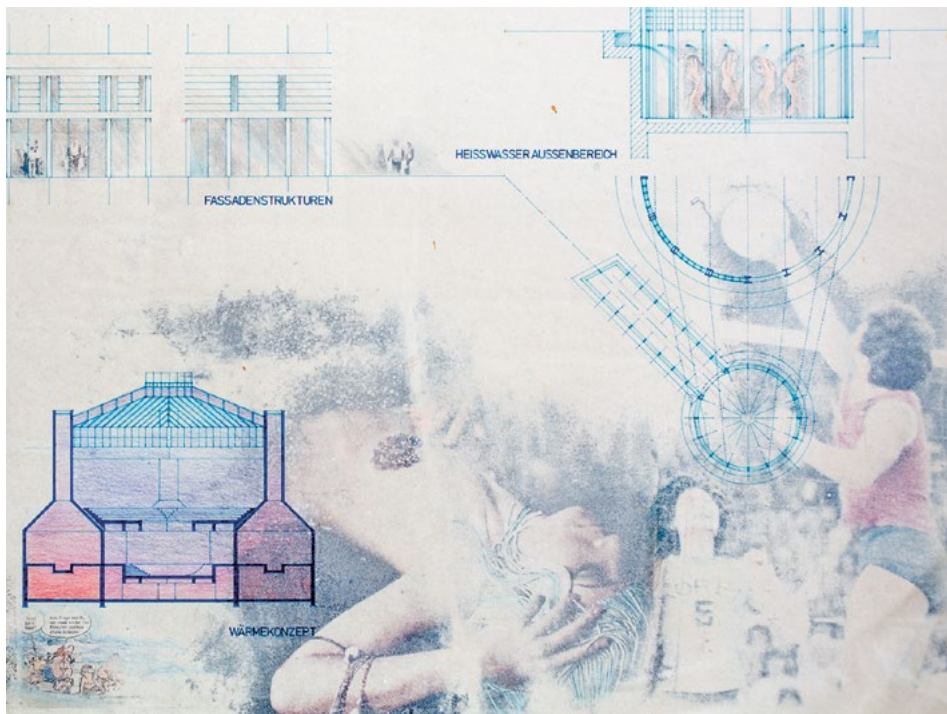


stand in contrast to the surroundings and airspace applied by airbrush from which the design emerges. Since a toothbrush is usually used to spray the ink, improvisation is not only for lack of, but also decidedly because of aesthetic calculation. Instead of calculated splashes, Rolf Blume places dot upon dot upon dot upon dot in his urban planning analysis of Helmstedt (1981). Their varying density illustrates the perception of volume in urban spaces.

In colorization, too, handiwork lends the design renderings a unique aura. Helmut Flohr’s views accentuated with russet and luminous white are evidence of this, as are the colored pencil works by Annette Kläner gently merging buildings and nature. Additionally, Michael Drewitz treats the portrayal of his design (1983) with acetone. On the front cover he creates a collage from printed images, which are transferred to transparent paper with the help of the solvent.

It is obvious that the production and processing of images has radically changed under the influence of the computer and digital camera. The transition to computerized portrayal techniques in the 1990s is nevertheless interesting. Nikolas Pomränke, for example (1998), explicitly shifts between digital and analog: he colors in the perspective views by hand in order to lend atmosphere to the vector drawings in the pre-Photoshop and Rhino age. At the end of more than a quarter of a century of constant rendering refinement, Simon Fischer once again consciously chooses a collage-like impression for his *Pop-Up Living* in Cologne (2019) design. They are indicative of a trend towards leaving the oversaturation

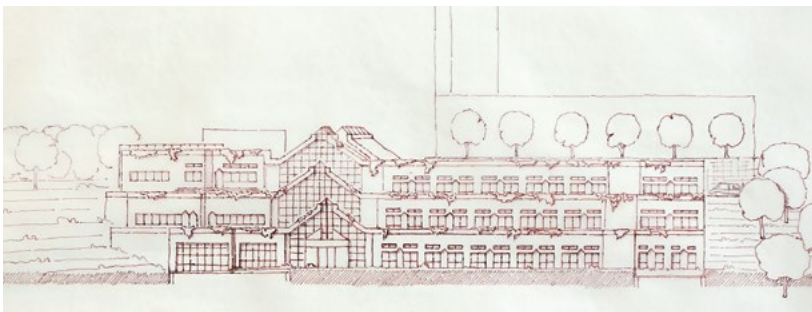
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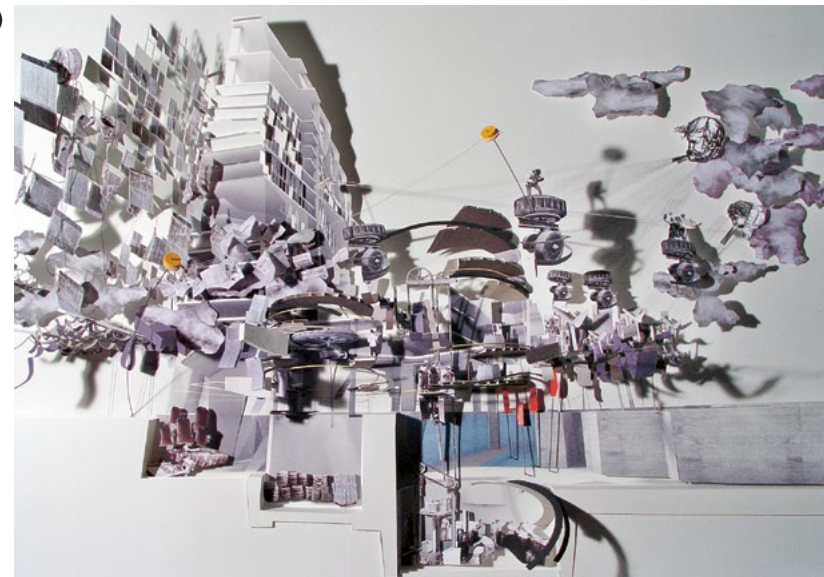
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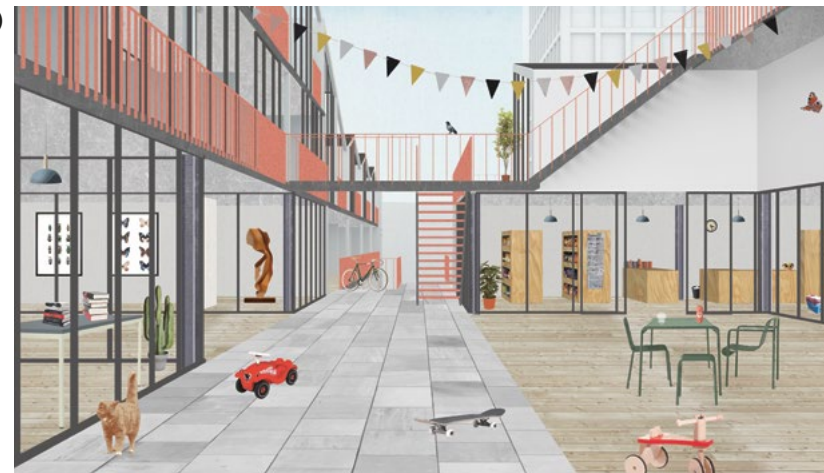
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of hyperreal illusionism behind and focusing instead more on showing their exemplary character while simultaneously being exceedingly atmospheric.

In order to surmount the two-dimensionality of paper, Hans-Joachim Witt resorts to scissors and glue in 1964. The roof construction [→STRUCTURE] and passenger planes in his airport terminal [→FLUGHAFEN] are highlighted both visually and also physically through their layering with the help of photo paper and aluminum foil.

Julian Busch enhances this approach to a delicate net of cut, folded, and elevated paper layers, which now finally leave the two-dimensionality of the drawing behind. His sectional model manufactured in 2009 emphatically shows how handiwork inspires design and presentation.

Europe's future will be decided not least of all by education. Establishing teaching commensurability and dismantling the hurdles to crediting academic performance is the academic equivalent of the political ideal of cooperation and exchange. The new Bachelor's and Master's degrees are therefore in the interest of students and teachers. However, it's not all smooth sailing with the so-called Bologna process.

For example, the German domestic effects of improved, continent-wide mobility of students. German universities and universities of applied sciences are now being treated equally when issuing Bachelor's degrees. However, they have to budget with a very different financial and personnel framework – a structural disadvantage for the latter, which can at best be offset through particularly high motivation and excellent study programs.

Whereas the change from Vor-Diplom to Haupt-Diplom (intermediate Diploma to the final phase of study) was once contingent on passing the in-house exams, students must now face competition between higher educational establishments – and often fall by the wayside at their own alma mater because of a reduced number of student spots for Master's degrees. So freedom of movement becomes an obligation to overcome. The option to 'grow into' architecture with an adequate amount of time to learn

the subject – which past age groups did with extended times of up to 19 semesters – is no longer an option [→CLASS].

On the contrary, the distribution of all academic performance into *credit points* conveys a mentality, which suggests students pay more attention to short study times and conformity with the study schedule than to individually developing their interests and strengths. In the same breath, the Bachelor's is cynically criticized as 'too short' to convey architecture in its full breadth and depth – which, however, the formal degree in an independent course of study "Bachelor of Architecture" claims. Quite right!, you want to shout, that the Chambers of Architects are resisting the dictate from Brussels and denying novices of the craft the right to refer to themselves as architects until their successful completion of an additional fourth Bachelor's year or attaining a Master's. But also: how unfair! to the students to sell them a degree that is not really considered a degree. Now it's confusion that reigns where dismantling hurdles was the declared goal.

In defense of the new system, it should also be mentioned that it previously wasn't possible to absolve the 'entire' training within the standard period of five years either. Another benefit of the reforms that can also be claimed is the additional opportunities to specialize as well as the growing diversification of degree subjects and topics now included in the Master's [→CURRICULUM].

What is most astonishing is that, in contrast to the intention of Bologna, fewer students are going abroad *during* their studies than before the promise of a Europe-wide accessible educational landscape. Servile obedience of the study program plans can, however, only be one of the reasons for that. The internalization of pan-European or even worldwide possibilities seems far more important for permitting today's students to conceive of a stint abroad as a job opportunity in offices in Copenhagen, Madrid, and Bratislava (but also beyond the EU in London, Dubai, or São Paulo) *after their studies*.

What young professionals need first are outstanding academic credits and degrees. However, the sense of a European identity – even if it is still so modest as to be expressed in the cumbersome standardization of a study label – is the foundation for overcoming boundaries and living as a European community. With their biographies, as with their final theses, young architects are building on the house of →EUROPE.

MEGA

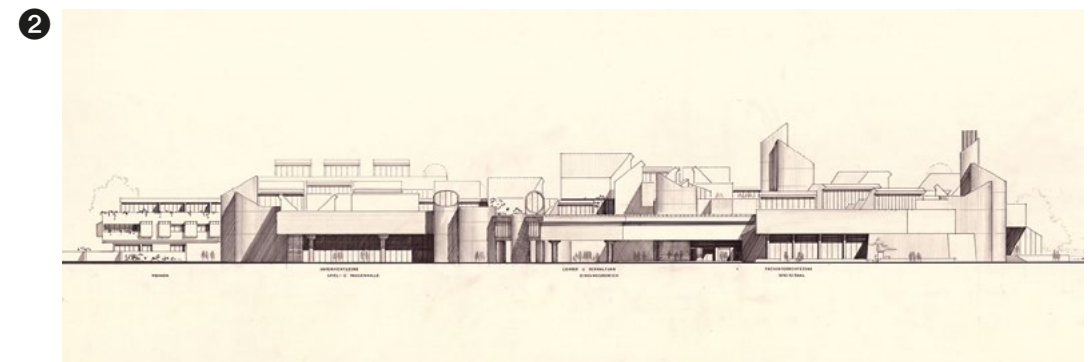
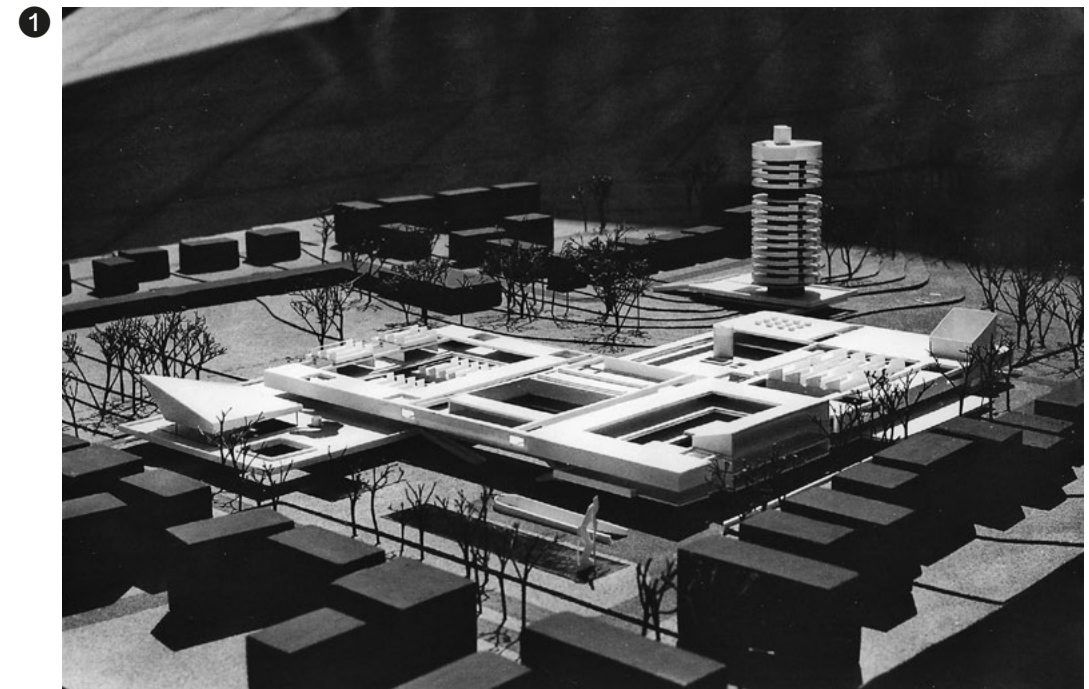
- 1 Diethelm Hoffmann, Braunschweig University of Art, 1963, Prof. Oesterlen, model
- 2 Helge Bofinger, Tagesheimgymnasium (daycare school facility), 1968, Prof. Kraemer, elevation

- 3 Erdal Dogrul, Film and Television Academy Hamburg, 1972, Prof. Lehbruck, elevation
- 4 Frank-Nikolaus Rickert, Drachentor (dragon gate), 2002, Prof. von Gerkan, model
- 5 Klaus Ihlenburg, Botanical Institute, 1985, Prof. Ostertag, elevation
- 6 Christel Erdmenger, Dencity London. An Urban Vertical Microcosm, 2016, Prof. R. Schuster, perspective view façade
- 7 Robert-Christopher Tubbenthal, Zentralarchiv Helvetica: das Gedächtnis der Schweiz (Central Archive Helvetica: the memory of Switzerland), 2016, Prof. Staab, perspective view and sections

Machine, ship, Wolkenbügel... in the wake of the dream and reality of the technically possible, architects have been producing an abundance of images since the Industrial Revolution, which conceive of and build architecture and the city more efficiently and globally interconnected. We decided to group final designs under the prefix “mega” based on how these designs busted traditional architectural scales and aspirations through the adoption of unprecedented proportions. For what conceptually unites Crystal Palace, Unité d’Habitation, and Eden Project is their way of conceiving of the city, nature and the world as interior worlds dominated by man and technology.

For example, you find everything under one roof in Peter Brandenburg’s 1972 *Sports and Recreation Park* [→OLYMPIA, STRUCTURE]. Likewise, Diethelm Hoffmann (1963) and Helge Bofinger’s (1968) educational structures are embracing the full sphere of life [→SCHOOL] with large shapes – sometimes structurally neutral, sometimes expressively sculptural. What these designs share is that their approach, unlike with →GRID, does not rely on modularity or virtually unlimited expandability, but instead celebrates their formal and social sovereignty.

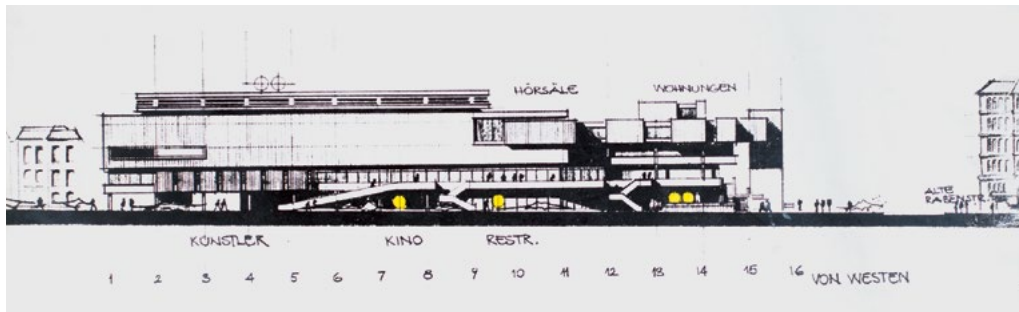
Mega architectural structures often work both *with* and *against* their environment. With the power of three cylinders, so it



would seem, Friedrich Pramann’s cultural center rests like a motor on a city hillside in the Mediterranean (1970) and nevertheless unfurls out of the topography of the location [→X^N]. And in that same year, Claus Gabriel also strives in function and expression for total autonomy while considering the genius loci with his *Technical College for Nautical Sciences*. The city contained in a building becomes an architectural ‘mothership’, which might raise anchor at any moment [→WATERBANK].

However, the fact that “Mega” provokes debate as a category, and that size in itself plays an inferior role in its determination, is demonstrated by the designs of Erdal Dogrul and Wolf Geipel among others. In 1972, and pursuant to their Diploma assignment, they moored their *Film and Television Academy Hamburg* in the middle of an environment characterized by compartmentalized

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parcels of land. Some neighbors might very well want to call it a mega-intrusion – an argument, which the drafters certainly preempted with gently articulated building volumes and open, flowing, ground floor spaces.

With self-assuredness, the skyscraper towers of Marc Aurel Jensen (*Vertical Village*, 2007), Frank-Nikolaus Rickert (*Drachentor*, 2002), and Christel Erdmenger (*Density London*, 2016) rise beyond their surroundings into the sky. It is through them that the highrise now truly becomes a city, and to inhabit the vertical becomes seemingly effortless: be it as a ‘Wohnmaschine’ for Latin American megacities, as a self-erecting and dismantling plug-in city for Chinese company headquarters in the whirlwind of the global economy, or as a building block system for London’s grasp for the clouds [→GLOBAL].

What remains is the question of understanding and addressing nature within such comprehensive building volumes. Robert-Christopher Tubbenthal (2016) takes on this challenge by ramming the megaform of his *Central Archive* into the depth of the Swiss mountains.

And again, on a more manageable scale, Klaus Ihlenburg, Annette Kläner (both *Botanical Institute*, 1985) and Gylfi Guðjónsson

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(*Training Center Rhode*, 1973) address this topic and, through their works, show how the antagonism between architecture and nature in the Anthropocene might be resolved at times gradually, and at times fluidly [→RIEGEL, AUTOMOBILE].

FURTHER READING

Sloterdijk, Peter: *Sphären II. Globen* (Spheres II. Globes), Frankfurt a.M. 1999.

MELDE- AUSSTELLUNG

- 1 Portfolio exhibition of Horst Goebel, 1954
- 2 Portfolio exhibition of Müge Güçsav, 1972

For years, one of the conventions of the Braunschweig architecture education was for students to present all of their designs to the university public in order to register for their final exams [→QUANTITY]. This gave the future architects an occasion to reflect on what they had accomplished up until that point. It also gave the faculty an opportunity to supervise progress and provided younger students guidance. According to the Diploma exam regulations in the 1950s, this kind of “Meldeausstellung” (portfolio exhibition) was required.

Over the years, the status and character of this event transformed. As a rule, candidates from a new Diploma →CLASS presented their drawings, models, and texts in the foyers of the Altgebäude, Audimax, Aquarium, or BS4 once a semester. Whereas “the exam was a matter of determining whether the cand. arch. was ready to be admitted to the main exam” (Erdal Dogrul, Diploma 1972), the presentation was soon perceived as an obligatory “tradition, and not an exam” by registrants (Andreas Möhlmann, Diploma 1980). Ultimately, a social gathering in the form of a huge party at the presentation and in the →ZEICHENSAAL was in the foreground. However, “the event was also considered an important stage of the pre-Diploma period” (Simon Paulus, Diploma 1999). The Meldeausstellung, no longer seen as an obligation but as more of a voluntary academic exercise, took on the character of a col-



orful and also culinary bazaar. The registrants often created their bunks out of partitions and tables with great creative ambition. This method of presentation in front of the faculty, fellow students, friends, and relatives was a working report and often a creative statement using elements of fair construction. The soon-to-be graduates presented their architectural accomplishments to date, creating an occasion for social cooperation among faculty, and facing criticism from professors and other teaching staff.

The Meldeausstellung could also be a kind of business card for the architects-to-be. Some local architecture firms and alumni from the vicinity or more remote large cities used the opportunity to meet young talents for their teams. During good years, several exhibitors got job offers before even starting their Diploma design as creative potential was scooped up by firms early on. The Meldeausstellung was a fixed date in the calendars of many active and former university members, a meeting point and university public exhibition of the faculty. This tradition ended soon after the turn of the century.

NUSSBERG

- 1 Helmut Flohr, Nußberg Casino, 1959, Prof. Oesterlen, perspective view
- 2 Horst von Bassewitz, Nußberg Casino, 1959, Prof. Oesterlen, elevation from the south
- 3 Andrea Becker-Bergemann, Media Library, 1988, Prof. Ostertag, site plan
- 4 Benedikt Hotze, Necropolis – City of the Dead, 1993, Prof. Ostertag, site plan
- 5 Imke Woelk, Necropolis – City of the Dead, 1993, Prof. Ostertag, site plan and sketch quarry

The Nußberg, situated between the →OKER meadow and Riddags-
hausen, is more of a hillock than a mountain, even in the context
of the northern German plain. For a long time, the slope at the
end of Prinzenpark mainly served as a quarry, but then also as a
military firing range, a lookout, and a sled run. It became the van-
ishing point for the important urban development axis starting
off the cathedral, the Brunswick Lion and the Dankwarderode
Castle passing Steinweg and the Staatstheater through Östlich-
es Ringgebiet, a well-off district east of Braunschweig's center.
Nazi planners had continued the axis through the Stadtpark. They
added a turret to the gently sloping hillside, part of a so-called
thingstead inserted in the hillock. This historically and topograph-
ically loaded location inside the city limits repeatedly offered the
Braunschweig architecture department an opportunity for design
assignments.

In 1959, in light of Braunschweig's re-construction after its
bombing during World War II, Prof. Oesterlen assigns a Diploma
design for a Nußberg casino. With his proposal, Horst von Basse-
witz wants to create a new main attraction out of the neglected
ground at Franzisches Feld. One that would offer this historical
site something distinctly 'modern' compared to the previous ap-
proaches and uses. In a drawing for the same Diploma assignment,

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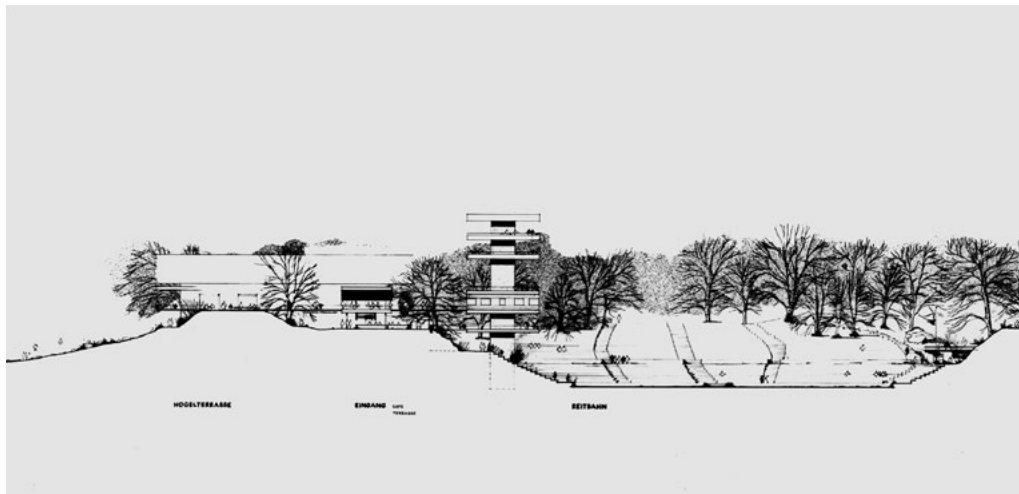
Helmut Flohr's design leads the viewer up a path to the hill where
the casino is located on a high ground embedded in the landscape.

In 1968, Helge Bofinger shifts the large sculptural form of
his *Daycare School Facility* off the urban axis (Jasperallee) be-
tween Nußberg and the inner city onto the edge of Franzisches
Feld [→SCHOOL].

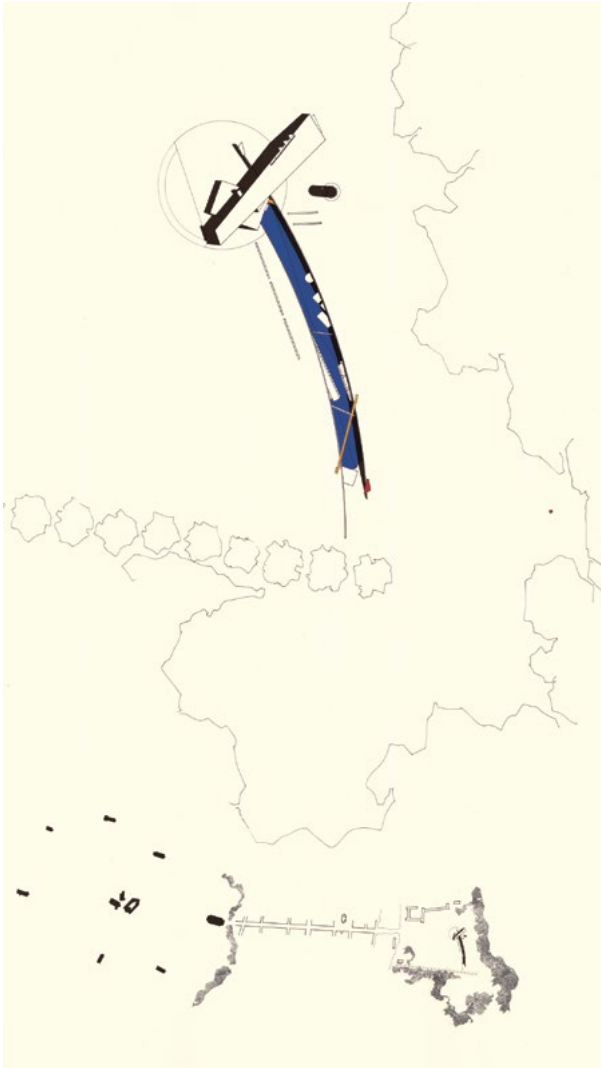
The topography determines the design. This also becomes
clear in later Diploma assignments and their respective solutions.
Andrea Becker-Bergemann plays with the height ratios of the gen-
tly sloping area in her proposal for a *Media Library* (1988). Her design
consists of sub-surface building sections and a library on stilts.

Imke Woelk and Benedikt Hotze also compose with the
topography to design Nußberg as a space of collective memory.
Their designs for a *Necropolis – City of the Dead* (1993) intention-
ally work, on one side, against and, on the other side, with the
landscape formations. Hotze's structures dissect the depression
of the former quarry thus allocating "both the living and the dead
a distinct place" with one brusque gesture. Imke Woelk interprets
the quarry as an ambiguous figure, something between mere hol-
low ground and the womb of Mother Earth. As such, the starting
point for her reflections on the necropolis is the topic of death as
a transition between becoming and dying.

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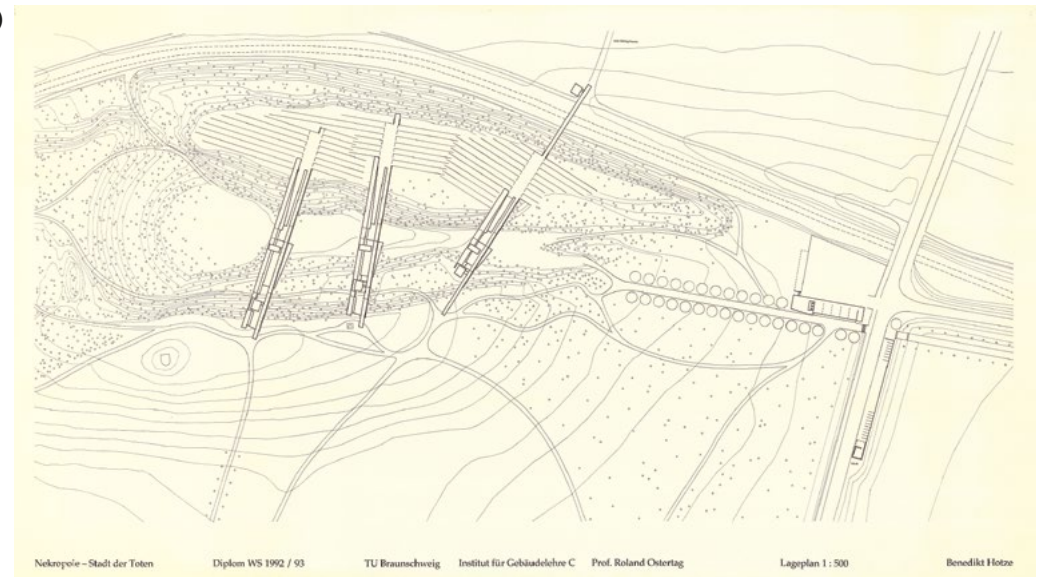


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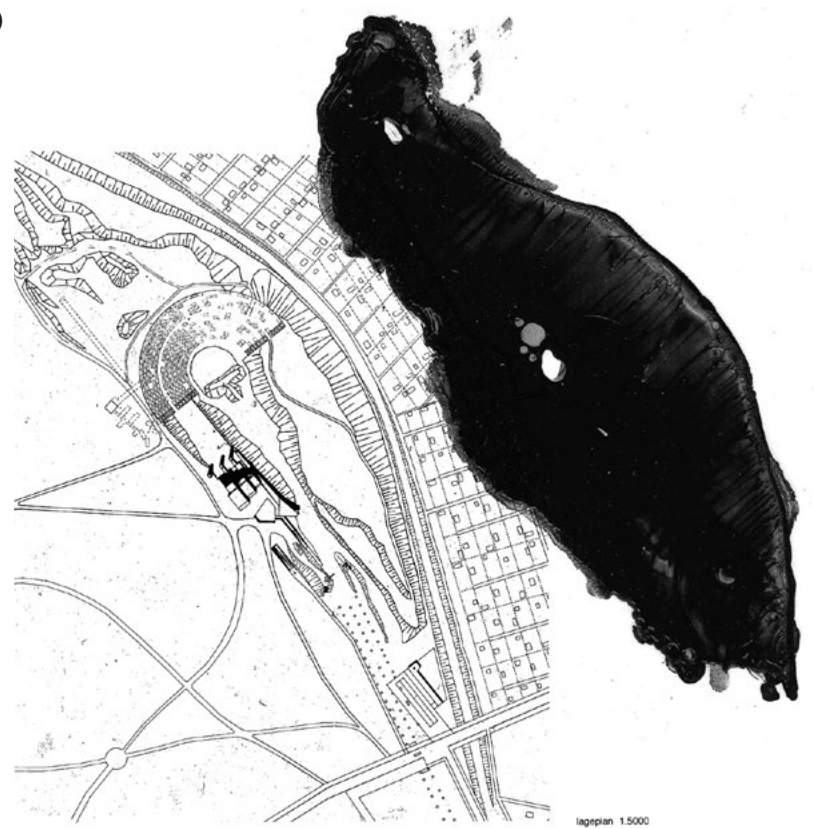


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NUSSBERG

- 1 Margret Weber, Botanical Institute, 1985, Prof. Ostertag, elevation
- 2 Sönke Lorentzen, Brücke der Nationen (bridge of nations), 1979, Prof. Wagner, elevation from the river Oker
- 3 Horst Goebel, Development Plan near the City Traffic Intersection Augusttor in Braunschweig, 1955, Prof. Göderitz, elevation and floor plans
- 4 Ortwin Heipe, Youth Residence and Social Services Institution, 1981, Prof. Ostertag, site plan, isometric drawing and elevation
- 5 Uwe Schüler, Engineering School, 1969, Prof. Strizic, site plan

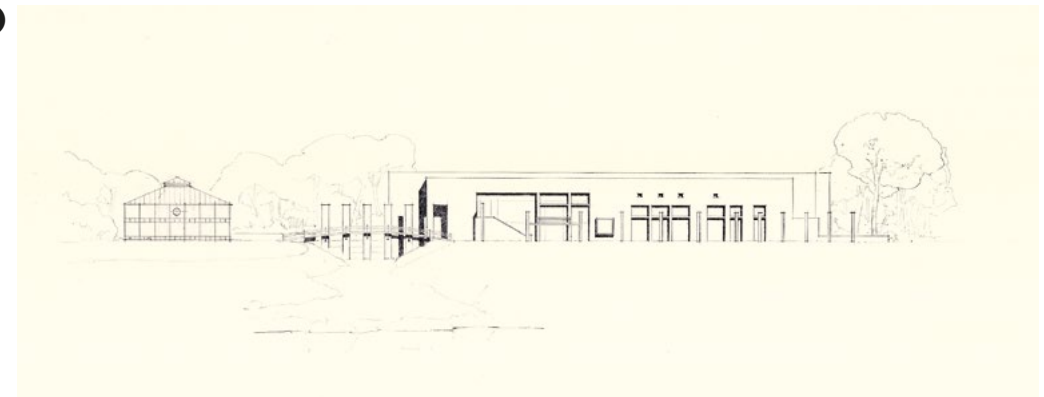
It makes sense to deal with what is right in front of your eyes. So it is no surprise that professors frequently made construction projects in the city of Braunschweig a Diploma thesis topic. And it was not just Friedrich Wilhelm Kraemer and Johannes Göderitz, who were directly involved in city planning. Rather, the large majority of professors were dedicated to the university's location and its immediate surroundings.

Many of these urban development and architectural assignments dealt with property along the so-called Okerumflut: that large figure of the river Oker encompassing and defining the inner city, also near where the majority of architectural institutes did and do reside.

Helga Herrenberger's 1948 design for a *Marionette Theater at the Löwenwall* and Horst Goebel's 1955 development plan near the city traffic intersection Augusttor which was destroyed in World War II, exemplify the years of intense preoccupation with the re-construction [→DEPARTURE] of Braunschweig.

The Oker is always both a catalyst and a limitation to overcome. Hinrich Schwanitz's design for a *State Parliament Building* (1961) spans the river branch running through the center of the site and joins the parliament to neighboring parts of the city [→KURVE]. By contrast, Sönke Lorentzen's *Bridge of Nations* from 1979 is a

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symbolic spanning. His design adds an annex, one that is intentionally withdrawn in its design, to Villa Bülow, a solitary historical structure located on the river.

By contrast, inner city *Youth Residence and Social Services Institution* by Ortwin Heipe (1981) integrates the existing structures of the former industrial area between the Oker and Frankfurter Straße. In Rüdiger Stauth's 1990 dissertation advised by Roland Ostertag, recommendations for how to lay an urban planning museum in an urban space are developed using Braunschweig as a model [→HORIZON, →USE].

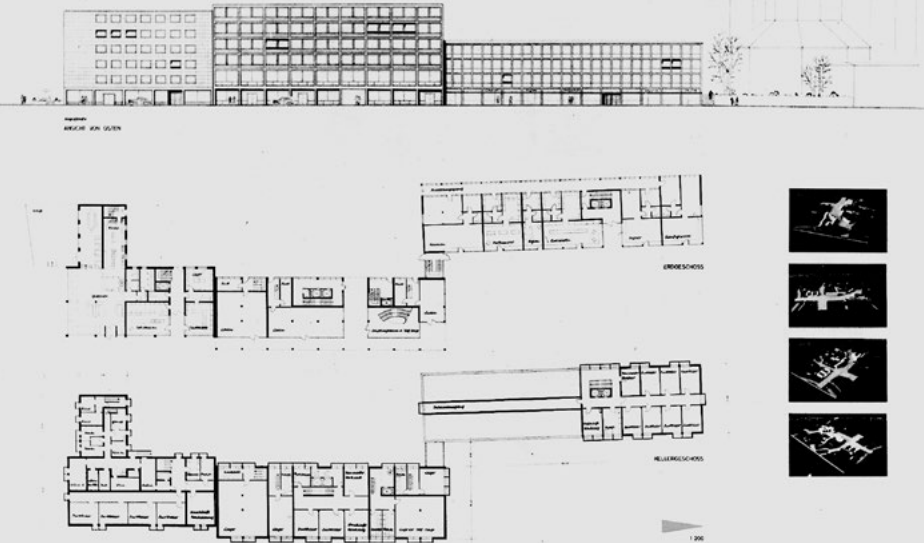
Several studies on new buildings and extensions of TU Braunschweig were part of Diploma assignments over the past decades. These include Uwe Schüler's design for an *Engineering School* (1969), Thomas Jansen's *Institute for Biology* (1970), as well as *Student Clubhouses* by Hans Kirchner and Michael Richter (1980) and the three *Botanical Institutes* designed by Klaus Ihlenburg, Annette Kläner, and Margret Weber in 1985.

In addition, large-scale housing projects, which inspired or seized on local planning discourses, were issued as design assignments. In 1990, Jörg Pollex is inspired to do more than just design residential units along the Oker in his Diploma on the topic of *Habitual living?* In light of the ever denser and growing cities, he urges us to become astrourbanauts since space on Earth is limited [→OVERSPILL TOWN].

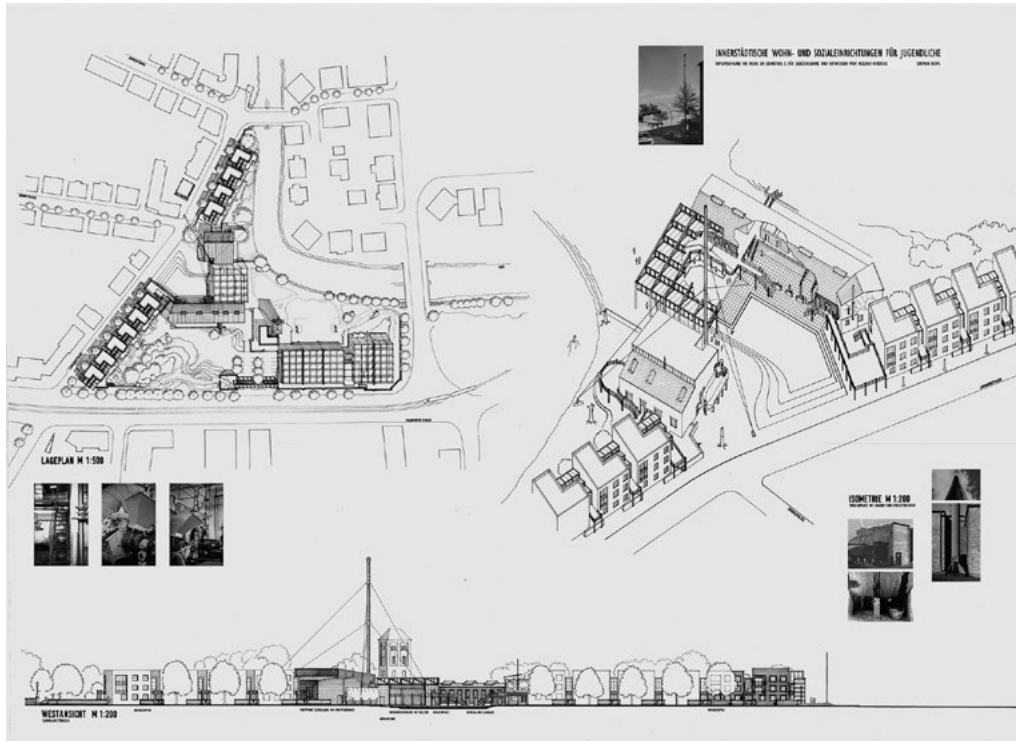
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PLANUNG AM AUGUSTTOR IN BRAUNSCHWEIG

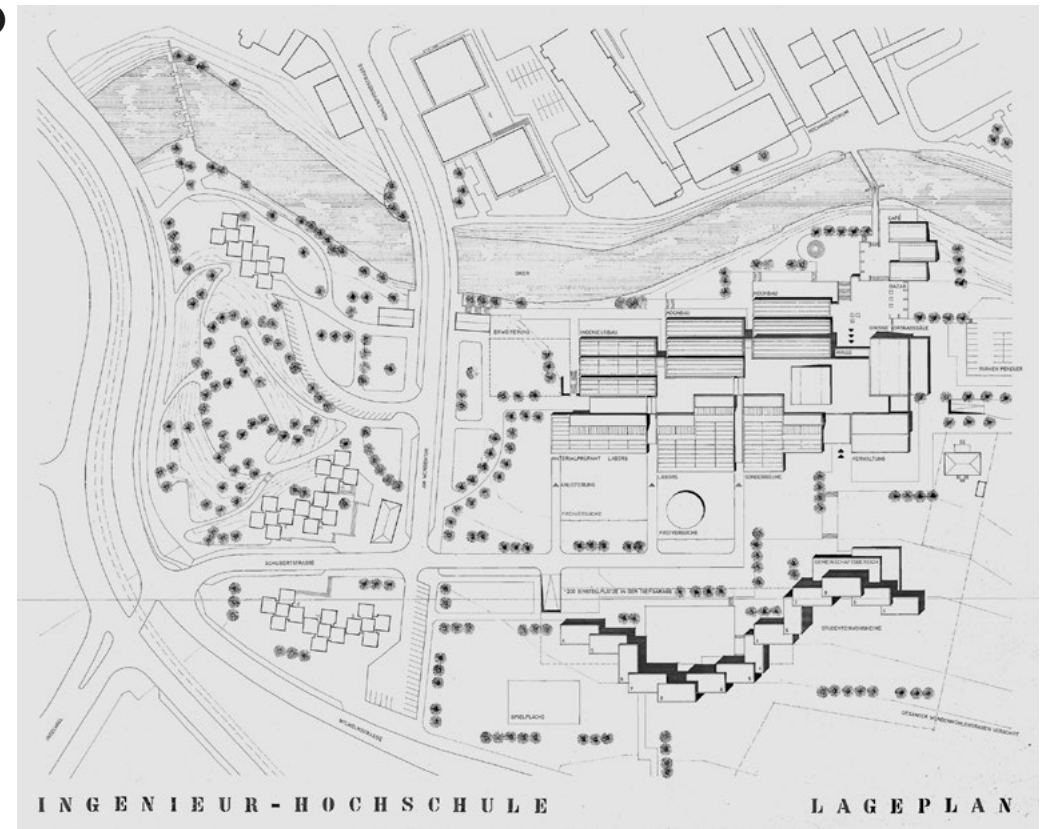
GEBIET 1A



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- 1 Karl-Heinz Hesse, Sports Hotel with Tourist Center in South Tyrol, 1956, Prof. Oesterlen, perspective view
- 2 Bruno Jalaß, Stadtbath (municipal bath) Mitte in Frankfurt am Main, 1953, Prof. Kraemer, perspective view
- 3 Julian Busch, Aerotopos 2018. Center for the Innsbruck Winter Games, 2009, Prof. Szyszkowitz, perspective view and axonometric projection
- 4 Jan-Peter Witte, Olympiade 2004 in Hamburg, 1988, Prof. Stracke, general plan
- 5 Harmen Thies, Community Facilities of a Wintersport Location in the High Alps, 1970, Prof. Oesterlen, model
- 6 Peter Brandenburg, Sports and Recreation Park Saalermühle, 1972, Prof. Kraemer, floor plan

The compulsory and freestyle are often side by side in sports – and the Diploma assignment and the Master's thesis also combine both categories in order to provide proof of future architects' abilities. Sports structures merely confirm the rule in this case, while still positing a concrete task and general requirement for the assignment in a conceptual context and special manner. However, sports structures are not on the victor's podium in our architecture department. With 277 of 5003 Diplomas, they lag behind educational, cultural, public and administrative buildings in fifth place for building construction assignments between 1945 and 2015. There was also no boom worth mentioning for this assignment in the past five years.

Despite being fit for competitions, one happily lingers in the water of Bruno Jalaß' reconstruction of the *Municipal Bath Mitte in Frankfurt am Main* (1953) until the very last moment. The still young, bustling FRG permits itself a moment of respite in the light-flooded hall. Only the clock on the front wall provides an indication of the approaching end to the lunch break in the trade fair and finance metropolis of West Germany [→DEPARTURE].

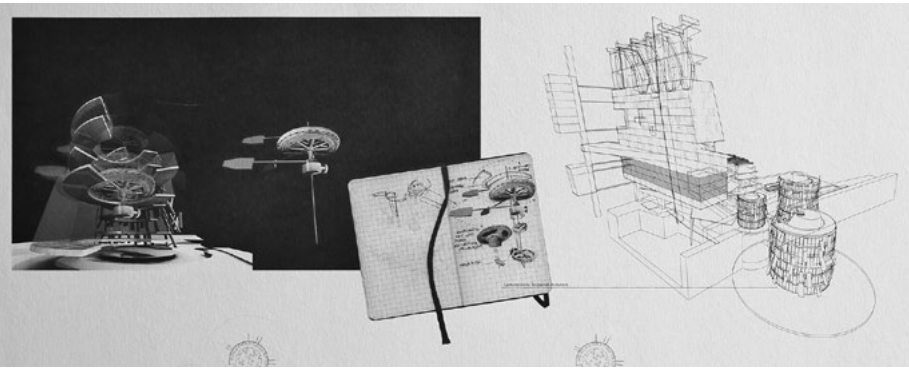
Light also plays a prominent role in Peter Brandenburg's *Sports and Recreation Park Saalermühle* from 1972. A succession of delicate halls of varying width stretch beneath a visible MERO



ball node → STRUCTURE. Throughout them, all features from the sauna, to the go-cart track, to bowling, to ice sports enter into close union like in a “canopied streetspace” (Brandenburg) [→MEGA].

In 2006 at Berlin's Alexanderplatz, Frederik Siekmann folds the street space upwards. Visitors gain access to the new possibilities of stacked *Sportscapes* via a ramp. Shifts between “promenade system” and “sport capacity” (Siekmann) form a complex spatial structure in which playgrounds, a fitness trail, and a sun terrace dynamically rush towards the summit.

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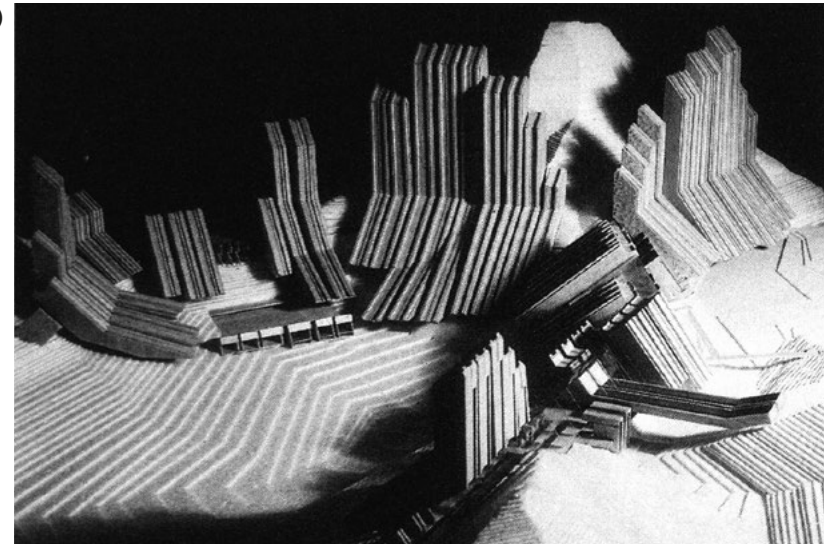


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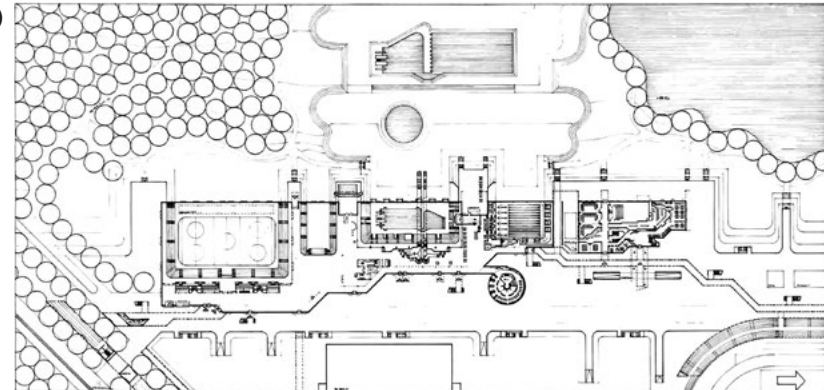


From early on Braunschweig ‘architecture athletes’ were quick to answer the call of the mountains. Like Karl-Heinz Hesse ventures out to South Tyrol in 1956 with growing flocks of tourists in the Wirtschaftswunder years. His sports hotel with tourist center proves that what we now like to describe as a ‘Braunschweig’ → RIEGEL in an allusion to the myth and trademark of a Braunschweig School, also cuts a fine figure in a fir grove glade – and also exports guiding urban principles into a rural space. From 1970 onwards, things get higher and higher. The community facilities of a wintersport location in the High Alps by Harmen Thies point to new building assignments in the wake of nascent mass skiing. And 39 years later, Julian Busch erects a new Mt. Olympus with his *Center for the Innsbruck Winter Games* in 2018 by storming the mountains.

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For the Olympic Games, the design of sports structures also becomes an urban task. In 1988, both Peter Ruge and Jan-Peter Witte set out to spatially organize Hamburg’s world sports entrance in 2004 [→DEPARTURE]. Although its status as Braunschweig’s local metropolis has certainly been contested by Berlin since then, the Hanseatic city was at least briefly out in front again in 2015 with regard to the Olympics. Had Hamburg’s citizens not hit the brakes, Braunschweig graduates would certainly have been brought into the planning again with their designs for “games on the water” (concept text of the application, which was withdrawn after the referendum) for 2024.

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Spode, Hasso (ed.): *Zur Sonne, zur Freiheit. Beiträge zur Tourismusgeschichte* (To the Sun, To Freedom. Contributions on the History of Tourism), Berlin 1991.

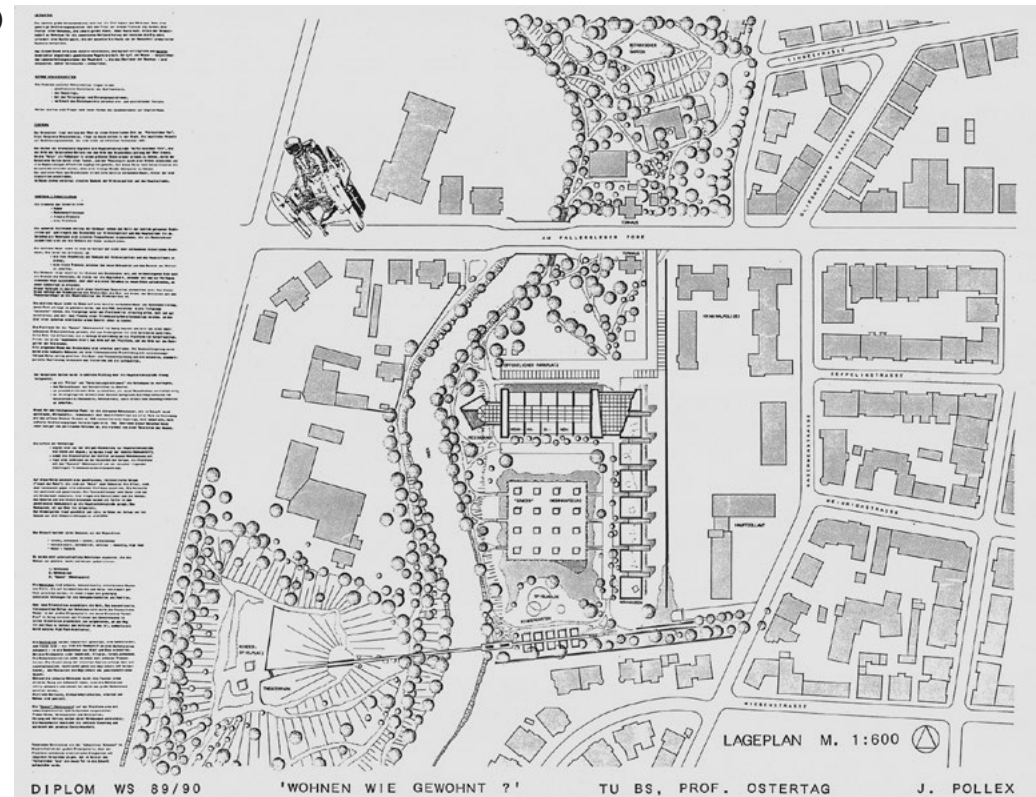
OVERSPILL TOWN

- 1 Jörg Pollex, Wohnen wie gewohnt (habitual living), 1990, Prof. Ostertag, site plan
- 2 Carsten Zillich, Wolfenbüttel. Ausbau eines regionalen Mittelzentrums (Extension of a Mid-Sized Town), 1968, Prof. Strizic, model
- 3 Müge Güçsav, Polytechnic University as Part of the Urban Development and Renewal Planning Based on the Example of the City of Hildesheim, 1972, Prof. Bruckmann, zoning plan / structural concept
- 4 Ernst-Detlef Kohl, Münster Gievenbeck Housing Development, 1965, Prof. Jensen, general plan

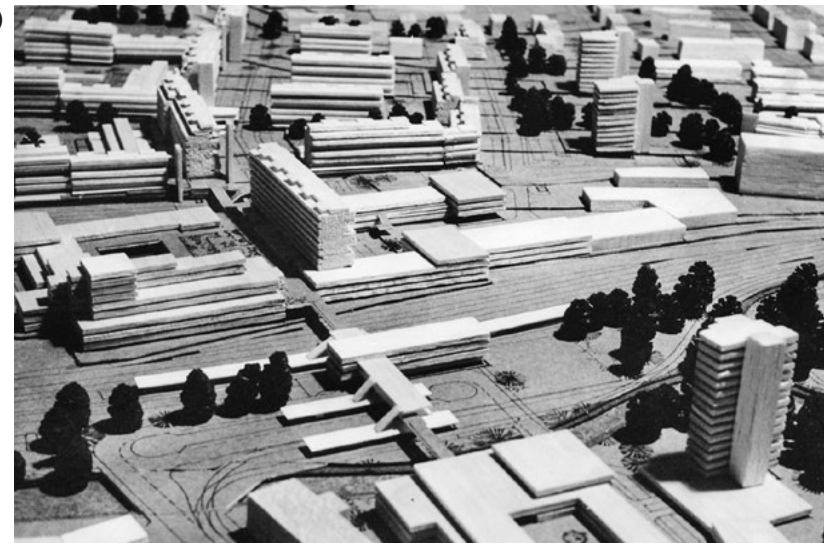
“Habitual living?” Jörg Pollex asks in 1990 in his Diploma project with Prof. Ostertag – and readily presents his building suggestions for Braunschweig with an ‘Astrourbanaut’ ascending into space [→OKER]. The statement is clear: “planetary urbanism” (Neil Brenner) also calls on us Braunschweigers to look beyond the edges of earth. The future of the city lies in the colonization of the universe. Surely a provocative overstatement, nonetheless the image of ‘space dwellers’ is a splendid choice. Even before the process of urbanization became tangible as one that will subjugate the entire planet, city planners and architects materialized the great dream of new urbane celestial bodies. Garden cities, large housing developments, and entirely new cities were meant to support the metropolises as satellites in order to steer their growth into the future.

The Diploma drafts by Ernst-Detlef Kohl (1965) and Carsten Zillich (1968) are such satellites, aka overspill towns. Only with the Gievenbeck housing development, Münster is developed as a whole, and Wolfenbüttel into a regional mid-sized town in order to steer the urbanization of East Lower Saxony onto the right track. In both cases, as the models seem to imply, industrial prefabricated mass constructions are supposed to help provide the new cities with a structural materialization indicative of the zeitgeist.

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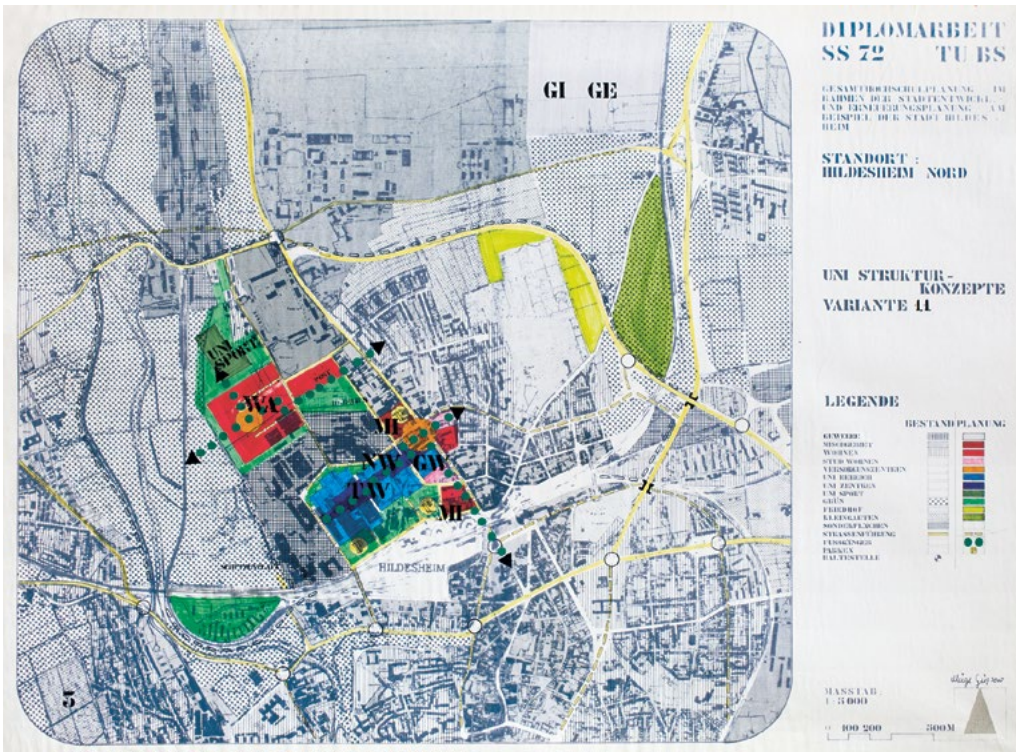


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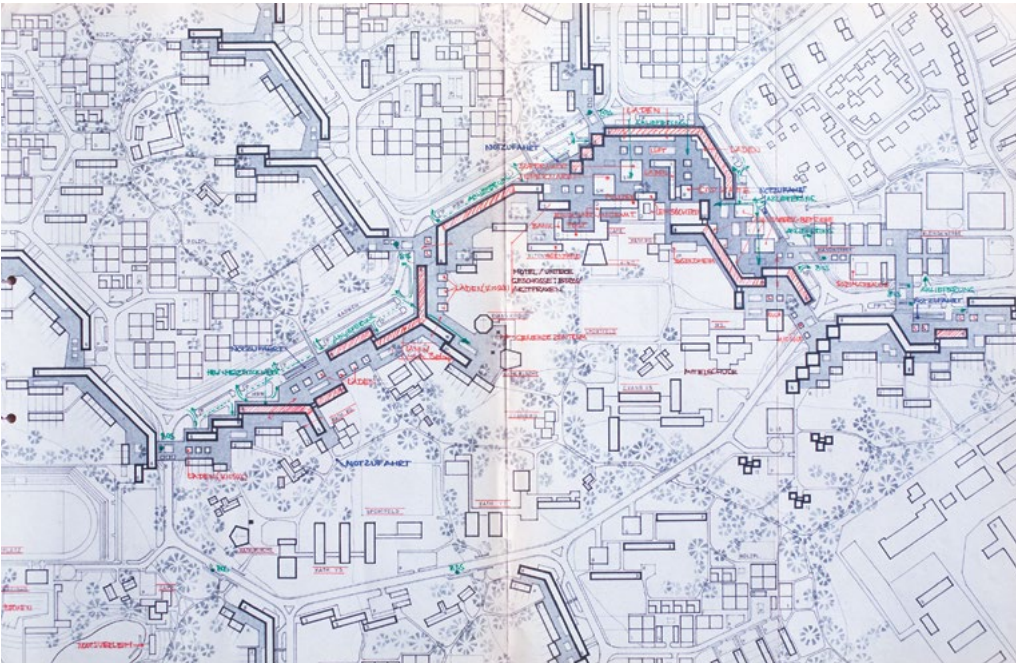


Car-friendly connection [→AUTOMOBILE] as well as a realization in subsequent construction phases conform to the logic of the “trailer” and the “companion” (which is what the German term “Trabant” aka overspill town originally refers to) to date. Mobility and growth still steer our thinking. Even if we now look for the benevolence of the ‘good city’ in other clothes [→EUTOPOS].

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How did the urban overspill town transform over the decades? With the dissolution of its structural borders since the 18th century and the unleashing of the pace and surmounting of physical space to date, that which we commonly call 'city' would be better

understood as part of the region and as a hub of global relations. However, if the city is “everywhere and in everything” (Ash Amin and Nigel Thrift), then who is moving as a satellite around whom? And where is the journey headed? At any rate, the housing complex on the green pasture as a signpost for the urban future has since been ousted by multi-nodal agglomeration spaces with their sub and peri-urban urban-rural continuums, conflicting island urbanism, and self-referential global passages of mobility.

Cities certainly do not have an emergency exit, nor does “Spacecraft Earth” (Richard Buckminster Fuller) that carries them. What remains is the search for how and where to build cities?, a task that Braunschweig’s students dedicate themselves to at two institutes of urbanism.

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Amin, Ash/Thrift, Nigel: Cities. Reimagining the Urban, London 2002.

Brenner, Neil: Critique of Urbanization. Selected Essays, Bauwelt Fundamente 156, Basel 2017.

Crutzen, Paul et al: Das Raumschiff Erde hat keinen Notausgang (The Spacecraft Earth Has No Emergency Exit), Frankfurt am Main 2011.

- 1 Horst Laskowski, Design for a Credit Bank, 1955, Prof. Kraemer, photomontage
- 2 Jürgen Friedemann, Architekturmuseum in Frankfurt am Main, 1979, Prof. Ostertag, site plan
- 3 Axel Beck, Quartier des Wissens. Bibliotheks- und Kongresszentrum (Quarter of knowledge. Library and conference center) Ljubljana, 2006, Prof. Szyszkowitz, isometric view and model
- 4 Fabian Busse, Brooklyn Navy Yards. Urban Sprout, 2013, Prof. Grüntuch-Ernst, elevation

The cube, as an archetype of architecture, occupies a dominant position among design ideas even in our small snippet from the world of building and construction. However, what we compile here under “Q-be” need not be a perfect cube. Rather, what the works have in common is the way they give complex interior structures a form, which plays on the theme of the cube, that is easily comprehensible from outside. All the designs shown here interact with their urban surroundings as assertive architectural structures. In so doing, they sort of illustrate the contrast to the →BELT composition form. Our selection follows three time periods: the fifties, the Postmodern around 1980, and the present (after 2000).

In 1955, Horst Laskowski designs a *Credit Bank*, which forms a near perfect square in the floorplan. The allure of the horizontal building is the contrast between the almost classical proportions and the transparent curtain wall. The delicate facade is relegated to the influence of a study of proportions, which played a prominent role in Friedrich Wilhelm Kraemer’s teachings in the 1950s. It shows a kind of monumental order on the ground and first floors, thus interpreting the modern curtain wall in the sense of traditional architectural proportions. This lends the building a light, albeit sort of earnest, elegance, which opens up to the urban space. Compare this to Friedrich Louis Simon’s bank building from 1853,

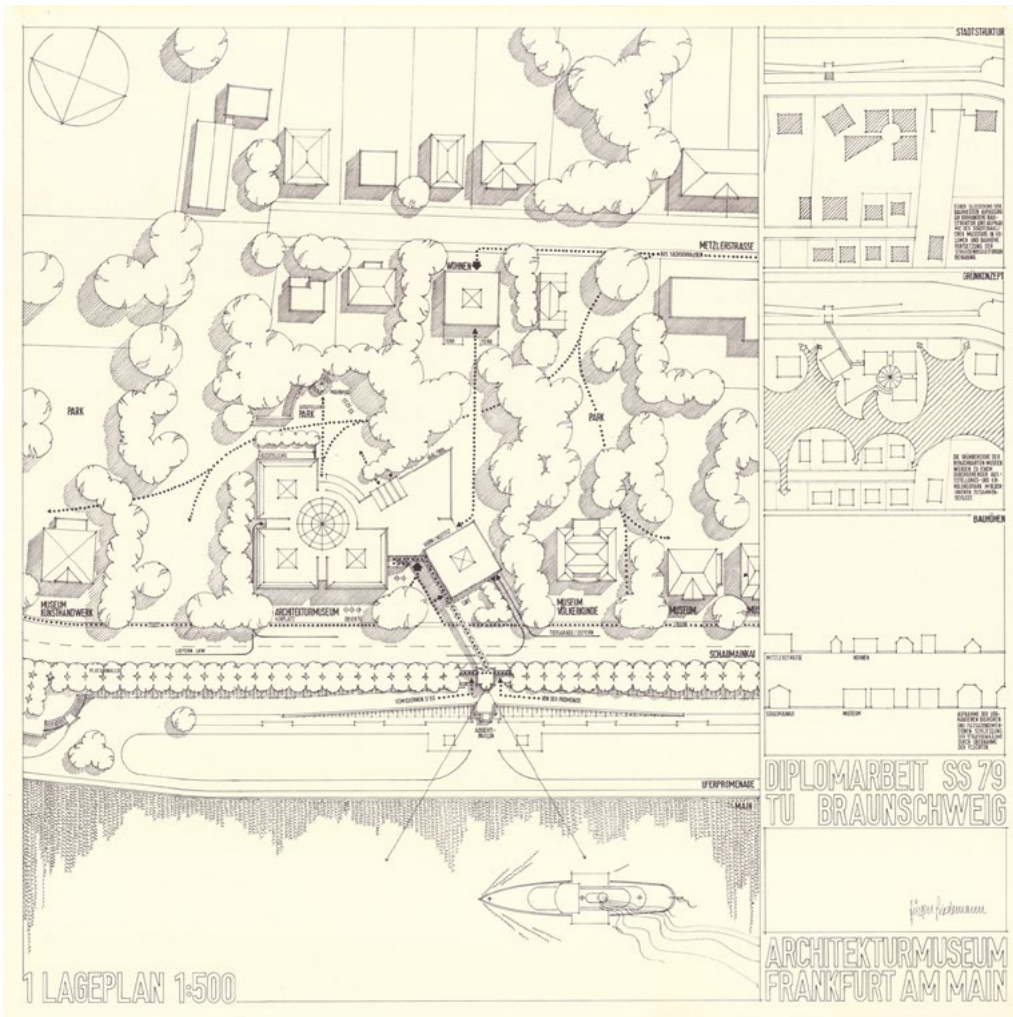


which stands on this exact spot at Braunschweig Bankplatz as a solid brick building with the ground floor clad in sandstone. Laskowski’s design appears like a paragon for the Braunschweig modern of the fifties. One matured through historical analysis [→DEPARTURE].

Jürgen Friedemann’s *Architekturmuseum in Frankfurt am Main* (1979) quite directly incorporates the morphology of the location’s surroundings. It abstracts the average size of the noble, detached townhouses to form a cube-shaped building block. Three such building blocks form a basic square figure. And at the point where the three corners meet, there is a domed hall. The fourth cube is screwed out of this figure and placed on the corner of the property as an independent structure. The cube teetering on the edge gives an urban accent along with a footbridge, which leads to a viewing pavilion on the banks of the Main. Friedemann’s design, supervised by Roland Ostertag in Braunschweig, is clearly inspired by Oswald Mathias Ungers’ search for fundamental architectural forms.

Axel Beck’s *Library and Conference Center Ljubljana* (2006) turns the monolithic of the cube into a program of variation: The building is to ascend prominently from the compartmentalized block structure, but, in so doing, function as the gravitational center of a new urban space. The design seeks a connection to the

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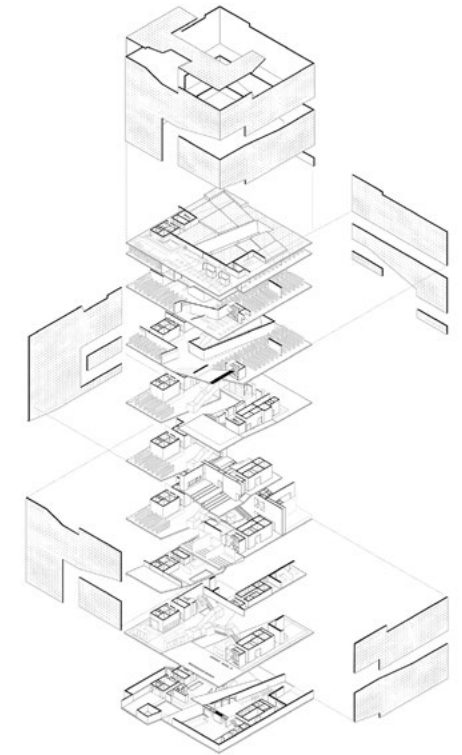
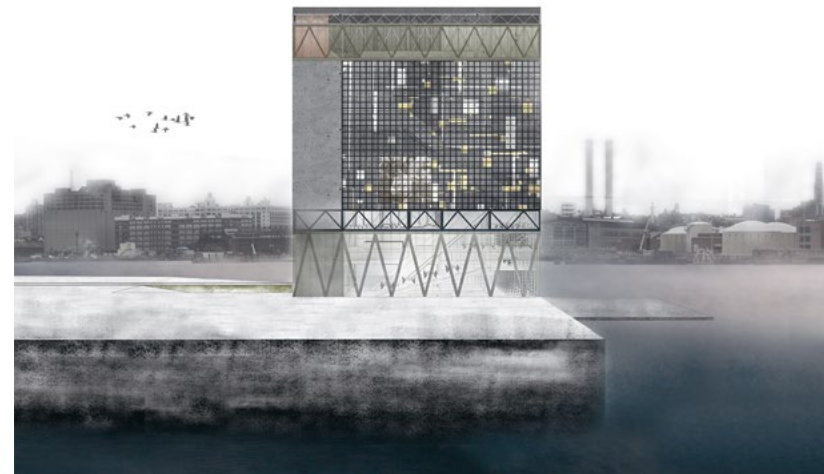
neighboring Slovenian National Library by Jože Plečnik, also an invention involving the cube. Beck reinterprets the dialectic of open and closed, heavy and light already thematized by Plečnik in a contemporary form language: harmoniously shaped out of the glassy transparency as well as the plastically formed perforated concrete cladding.

Fabian Busse is also convinced by the formal power of the cube as a particularly urban element. Though it houses the most diverse cultural functions, Busse's complex spatial structure clearly maintains the shape of the squared container. Placed on the tip of a Brooklyn harbor dock, the prominence of the slightly excessive cube is meant to herald to the metropolis that a new *Urban Sprout* (2013) is set to arise. Not a hermetic block, but rather a "mediatized shadowbox creating a different interplay in the facade projection" (Busse).

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- ① Martin Franck, 5th Construction Phase of the German National Library Leipzig, 2016, Prof. Karch, models and drawings overview
- ② Ulrich Hausmann, Sports Hall, 1958, Prof. Kraemer, details 1:1
- ③ Andreas Symietz, Civic Center in Riga, 1997, Prof. von Gerkan, models in different scales (here: urban context)
- ④ Thorsten Klöppelt, UN College Insel Hammerstein, 2004, Prof. R. Schuster, series of working models

The scope of output, which professors expected for final exams at the TH and TU Braunschweig and students deemed necessary and useful to present their designs, transformed over time in sheer scope and manner. There was a trend towards more comprehensive and especially more differentiated over the years. Thus – for all their individual differences – similarities and habits are visible in some phases without there ever having been a unifying standard.

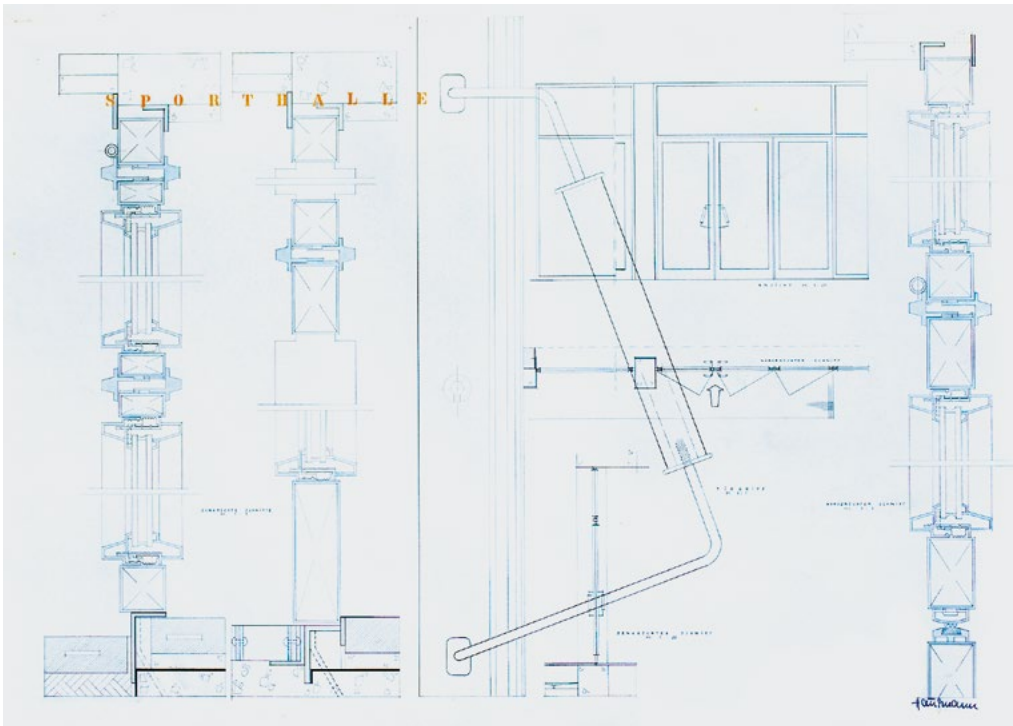
Generally, the output power demanded by the first postwar generation professors like Friedrich Wilhelm Kraemer and Dieter Oesterlen primarily served to document the result of the design process: at the center was the drawn representation of the design and usually a comprehensive explanatory report, a calculation of the constructed space, and an environmental model. The *Sports Hall* designed by Ulrich Hausmann in 1958, Maren Lauer's *Meeting Point at Schloßpark* from 1967, and the 1972 *Film and Television Academy Hamburg* designed by Erdal Dogrul document this type of Diploma work presented on sheets of uniform size and format. The design for the *Cultural Center Salzgitter Lebenstedt* by Hinrich Storch (1961), whose drawings are produced on 26 large-format sheets, is notably comprehensive. This kind of Diploma design was the last component of the final exams, composed of a series of oral and written exams in the required and elective subjects.



What influence the countless reforms and restructurings of the architectural studies as well as the change of professors specifically had on the Diploma works must remain open at this juncture. However, the introduction of coursework exams could have decidedly changed perceptions. They gave the Diploma work, distinctly removed from the less important exams as the study's finale, a special significance as a means of exemplarily demonstrating the design prowess of the cand. arch.

What we can determine is that over the course of time, model making played an increasingly important role in many Diplomas [→X^N]. For example, whereas only one environmental model in a 1:500 or 1:1000 scale was usually required for building construction designs in the fifties, it later became customary to have a second model produced to present the building in greater detail. At the very latest during the eighties, the model making requirements changed with a new generation of professors. In 1983, for example, Professor Gerhard Auer added the construction of a sectional model in a 1:100 scale to the agenda. And Michael Drewitz produced one such model to show the interior spaces of his *Thermal Baths*. In 1997, Andreas Symietz presented his design of a *Civic Center in Riga* alongside drawings in three wooden presentation models of varying scale. With regard to the level of detail

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and material processing, model making became more elaborate and was often only manageable with professional support in the university's own and external workshops [→ZEICHENSAAL]. It was not uncommon to sometimes have one or more models built by model makers.

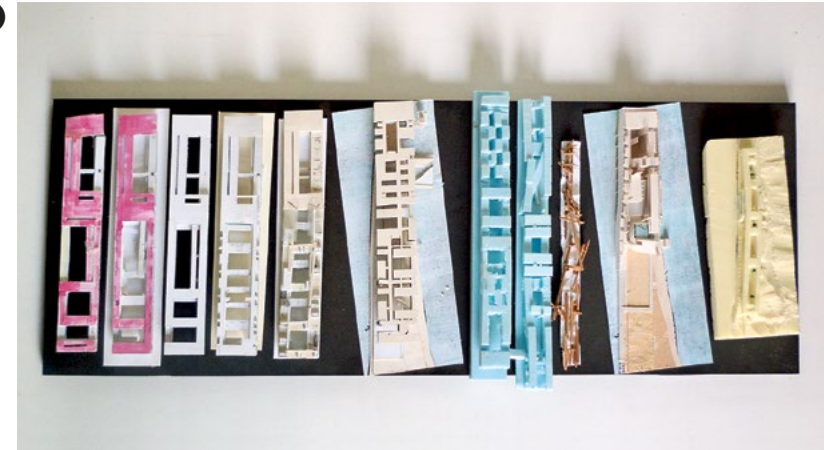
Many second and third postwar generation professors emphasized the documentation of the design process as a part of the output, now making extensive sketchbooks part of the submission. Professor Gerhard Wagner, for example, gave particular importance to entire series of working models that were intended to illustrate the process of designing. This was not the only substantial difference of the Diploma works of the last decades illustrated by Thorsten Klöppelt's *UN College Insel Hammerstein* designed in 2004 [→RIEGEL], Julian Busch's *Center for the Innsbruck Winter Games* in 2018 in Innsbruck [→OLYMPIA] drawn up in 2009, Dirk Terfehr's *Coastal Forum* from 2013, the scenario for the *Maritime City Bremerhaven*, which Anne Kettenburg developed in 2014 as a Master's thesis, (both →WATERBANK) and Martin Franck's Master's thesis *5th Construction Phase of the German National Library Leipzig* [→X^N] developed in 2016.

The graduates frequently composed whole series of plans and objects without strict guidelines let alone requirements from the institute. These were presented according to a dramaturgy

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developed for the spatial conditions of the architectural pavilion of the TU Braunschweig, which had been designed by Meinhard von Gerkan and his team. A number of different yet well composed paper formats, mounted drawings in wooden frames, and material collages and delicate installations blurring the borders between model and plan became established components of the submission to a Braunschweig degree in architecture.

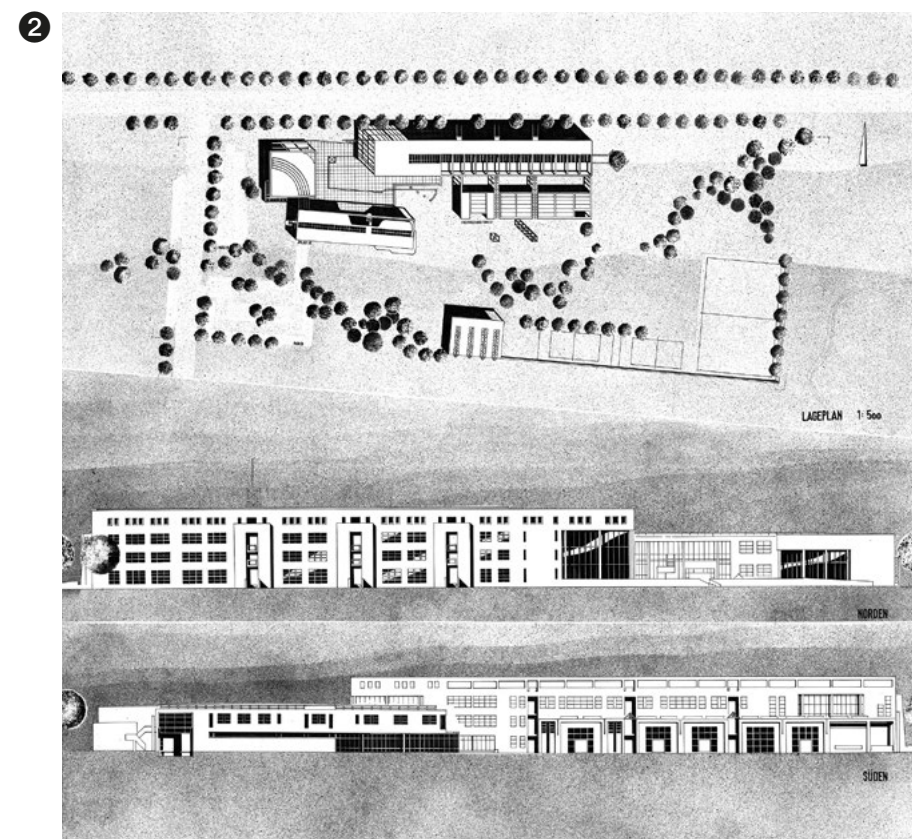
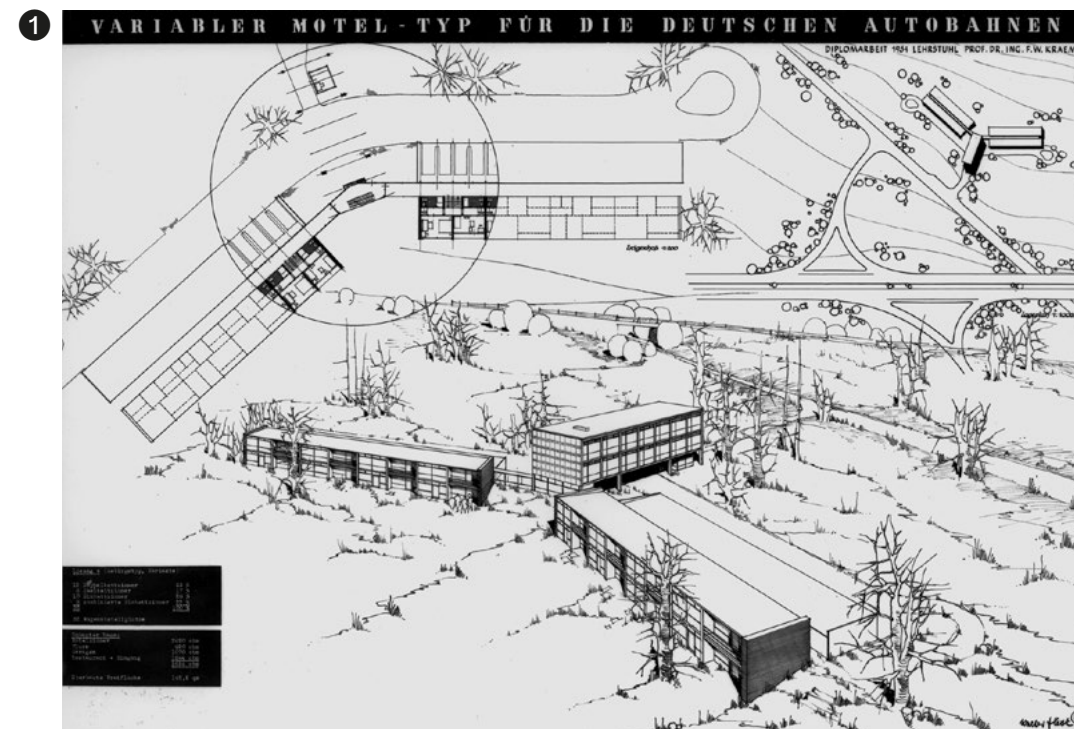
The extent to which the duration of the study was and is influenced by the scope of the required submission in and before graduation cannot be discussed in detail at this point. We can assume that numerous additional factors like the respective growth or degrowth of the construction sector and associated career paths, the potential to finance one's studies, and the zeitgeist all had significant influence on the question of when one did their Diploma or Master's degree, completing then their architecture studies after twelve, nineteen or even more semesters [→CLASS].

- 1 Walter Fleck, Design of a Variable Motel-Type for the German Motorway, 1954, Prof. Kraemer, solution 4: mountain type
- 2 Hartmut Zander, University of Applied Sciences Wolfsburg, 1980, Prof. von Gerkan, site plan and elevation from the north and south
- 3 Karen Brand, Manhattan Transfer, 1999, Prof. Schultz, perspective view
- 4 Annette Kläner, Botanical Institute, 1985, Prof. Ostertag, floor plan and elevation
- 5 Torsten Klöppelt, UN College Insel Hammerstein, 2004, Prof. R. Schuster, site plan and perspective view

In the second half of the 20th century, the Riegel became the darling of a building sector and building administration concerned with efficiency and construction costs. “Riegel” literally means “bar” or “bolt” and is used for an elongated, reclining building type. How to interpret the structural advantages of this building form with creative aspiration – these are the challenges architects in the Braunschweig architecture department, preparing themselves for professional life, repeatedly embraced in their final theses.

In 1954, Walter Fleck experimented with the diverse composition possibilities of the Riegel. While searching for a *Variable Motel-Type for the German Motorway*, he developed five versions in which numerous elongated buildings were joined in distinct formations depending on usage and traffic routing (→AUTOMOBILE). As with Karl-Heinz Hesse’s *Sports Hotel with Tourist Center in South Tyrol* from 1956 (→OLYMPIA), the efficiency of the Riegel is also put to the test for its stackability.

In his *University of Applied Sciences Wolfsburg* (1980), Hartmut Zander works with the tension between the accentuated longitudinal alignment of the Riegel and the need to create a composition with rhythm: Three protrusions mark the side entrances and subdivide the facade in what is perhaps an allusion to the Volkswagen factory, which defines the whole of Wolfsburg. In the interior,



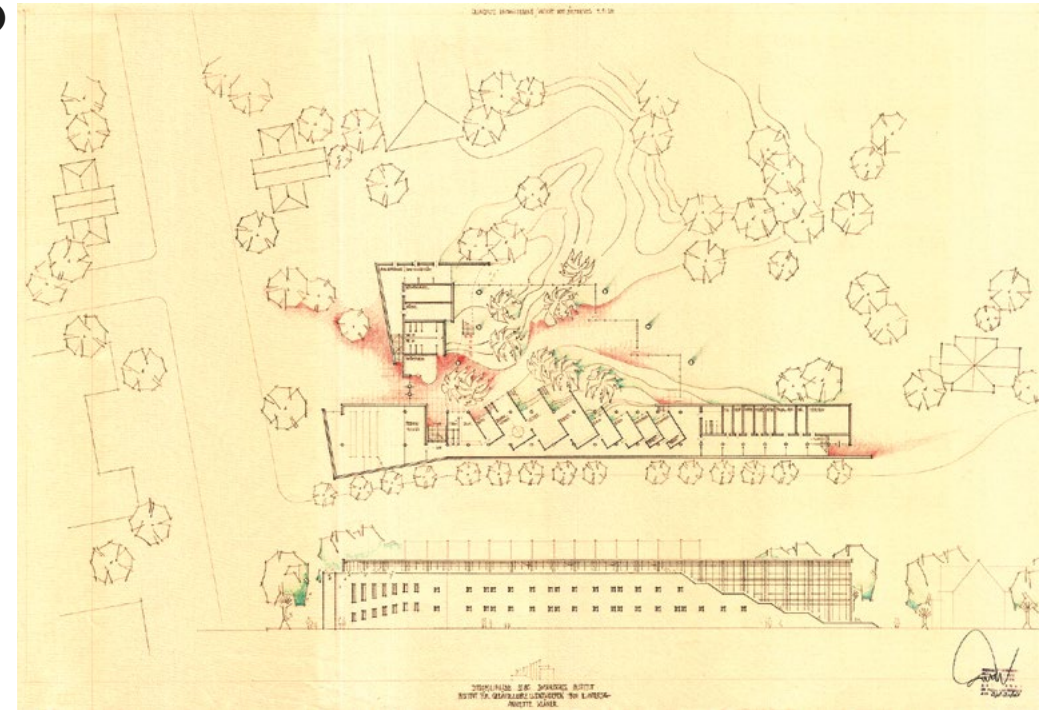
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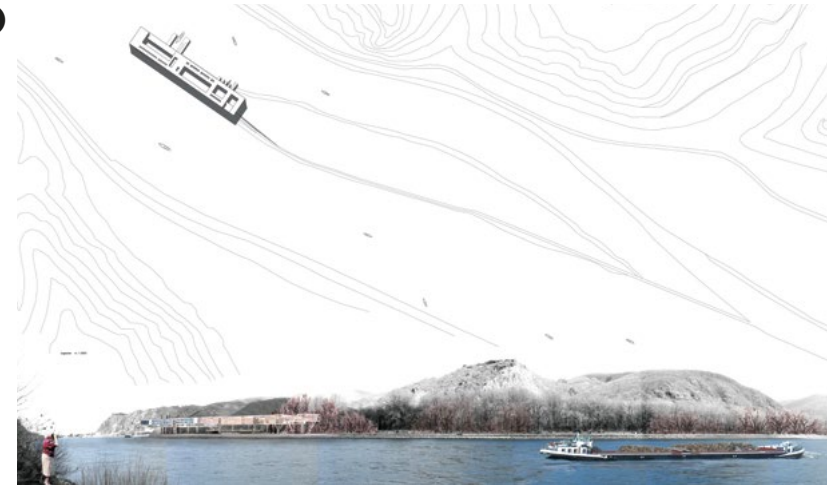
a narrow passage opening up to the sky via a glass ceiling emphasizes the elongated development in contrast to the short walkways crossing the airspace. In 1999, Karen Brand addresses the horizontality of the Riegel in an intentional contrast to the surrounding verticals of the skyscrapers with her ferry terminal in New York.

Annette Kläner, on the other hand, progressively dismantles the Riegel in 1985. The closed character of her *Botanical Institute*'s streetfront gradually reveals a glassy interior. And the strict

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building form also escapes its linear framework in the rear of the structure as it fluidly opens up to the botanical garden onto the →OKER. In the process, the laboratories, accessible from one side, pivot in a 45° angle from the main axis of the building thus interlocking the Riegel and the space in the back of the building. Ultimately, the Riegel ascends into the skies with Thorsten Klöppelt's design in 2004. The slim, elongated, right-angled volume of the *UN College Insel Hammerstein* deliberately subordinates itself to the Rhine Valley landscape and creates yet another counterpoint visible from a distance.

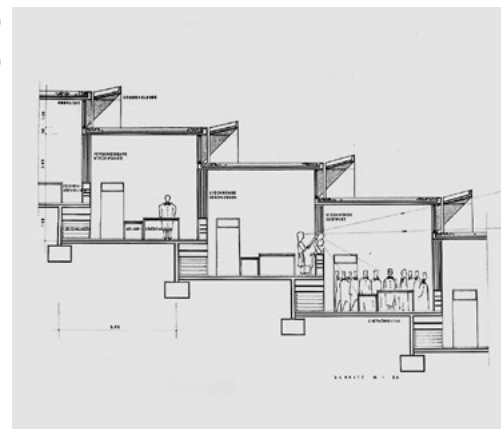
- 1 Dietrich Fischer, International Urban Design Centre, 1965, Prof. Oesterlen, section and detail of floor plan
- 2 Wilhelm Stute, Braunschweig University of Art, 1969, Prof. Kraemer, model

Until at least 2015, school and educational structures account for the most final theses by far in the architecture department with 1181 Diploma theses. Beyond the space allocation plan, one of the questions always considered when dealing with this type of building assignment is how and in what spaces we want to learn. With this in mind, Helge Bofinger designs a *Daycare School Facility* in 1968, which offers students a building landscape. One which invites them to explore and make it their own with its manifold pathways, stairways, and spaces [→MEGA].

However, we limit ourselves here to designs, which explicitly address higher education in design, building sciences, and engineering. It is no coincidence that an assignment like this one had its biggest boom during the educational expansion of the 1960s in Germany.

Diethelm Hoffmann's design devises its space in the sense of a clearly structured campus. In 1963, when the *Braunschweig University of Art* (HBK) is founded, he suggests a flat building flanked by multiple courtyards whose counterpoint would be a residential tower for students [→MEGA]. A mere six years later in 1969, with a growing demand for space at the HBK, a new building complex with workshops and ateliers once again makes a Diploma assignment for Wilhelm Stute.

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That same year and also for Braunschweig, Uwe Schüler designs an *Engineering School*. The property used for the work is directly south of the main TU campus and includes the urban restructuring of the Wendentorwall [→OKER] proposed by the city's administration at the time. In his assessment, Prof. Strizic emphasizes a "low building mass with a staggered terrace-like effect". A "pleasant" human scale is achieved through the interplay of a strong design [→GRID] and a loosened composition. Furthermore, this work also refers to the real Braunschweig planning history. By constructing residences at the south end of the campus as a sound barrier, the design is a response to the then contested plans of developing Wilhelmstraße into an urban motorway [→AUTOMOBILE].

Since 1945, architectural education has twice been the focus of the spatial planning program to be designed. In 1965, Dietrich Fischer designs an *International Urban Design Centre* for post graduate studies, which shifts the mutual collaboration of the [→ZEICHENSAAL] to the focal point. On the other hand, Luis Ziebold's *Architecture School for Braunschweig* from 2013 thematizes encounters and communication catalyzed by architecture and questions changes to architectural education and its spatial demands in the wake of the Bologna process [→CURRICULUM, MASTER].

FURTHER READING

Blömer, Daniel: *Topographie der Gesamtschule: zum Zusammenhang von Pädagogik und Raum* (Topography of the Comprehensive School: On the Cohesion Between Pedagogy and Space), Bad Heilbrunn 2011.

Kemnitz, Heidemarie: *Vom Raum in der Pädagogik* (On Space in Pedagogy), in: Hildebrandt-Stramann, Reiner/ Probst, Andrea (ed.): *Pädagogische Bewegungsräume – aktuelle und zukünftige Entwicklungen* (Pedagogic Spaces for Movement – Current and Future Developments) (Schriften der Deutschen Vereinigung für Sportwissenschaft 259 (Publications from the German Society of Sports Science)), Hamburg 2016, pgs. 16–32.

STRUCTURE

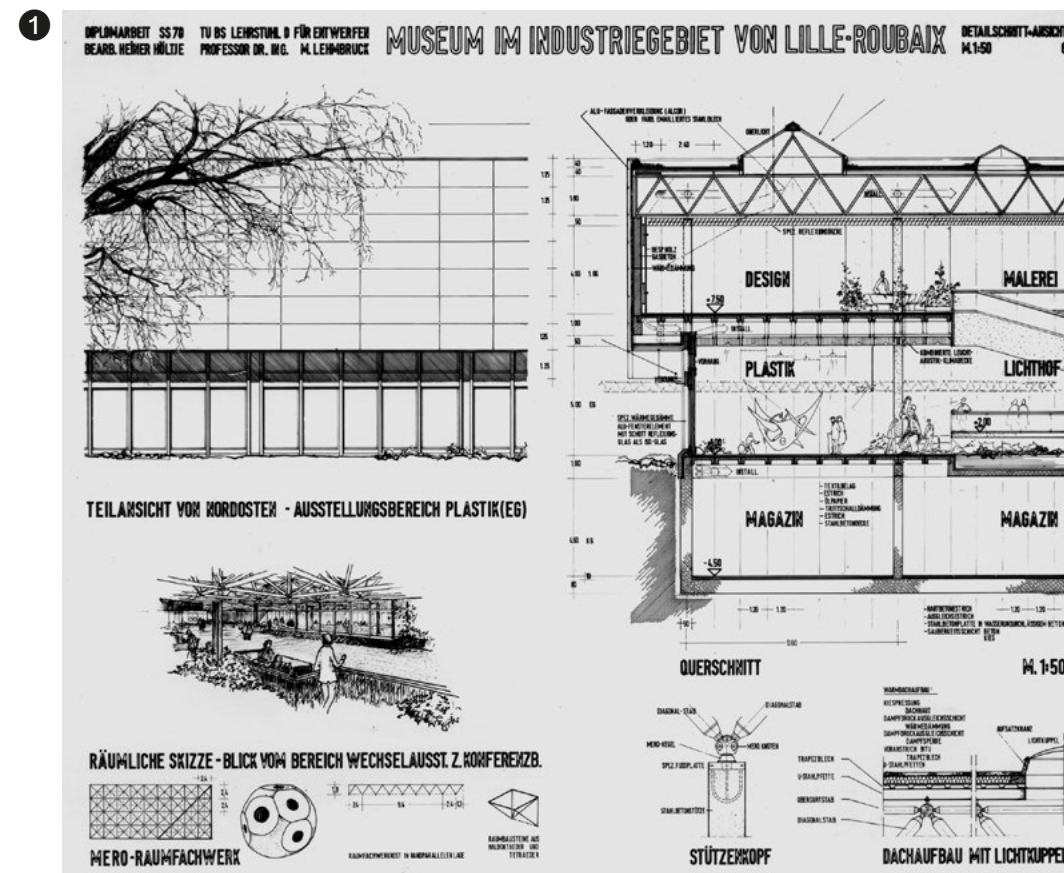
- 1 Heiner Höltje, Museum in the Industrial Area of Lille-Roubaix, 1978, Prof. Lehmbruck, details and structural system
- 2 Anke Westphal, Clock Factory in Celle, 1993, Prof. Schulitz, sectional view
- 3 Matthias Rätzel, Rotation. Publishing and Printing Building for the Magdeburger Allgemeine Zeitung, 1991, Prof. Ostertag, isometric drawing of construction principle
- 4 Ulrich Hassels, Synchrotron TU Braunschweig, 1979, Prof. Henn, constructional detail
- 5 Lutz Käferhaus, Kurhaus eines Badeortes (Spa House at a Bathing Resort), 1967, Prof. Kraemer, section
- 6 Jan Pingel, Weingut (vineyard) Frank & Frei, 2008, Prof. Roth, model of constructional detail

The fact that building construction and structural design are an inherent part of architectural education is not least of all evident in those final theses, which have gone beyond design requirements to work out solutions that also explicitly address efficient load transfer and material-fit connections.

From this point of view, the post-free spanning of large spaces was a frequent topic. The perspectives by Hans-Joachim Witt (1964; →FLUGHAFEN) and Michael Richter (1980; →HEARTH), as well as the explicit use of the MERO ball node system by Peter Brandenburg (1972; →MEGA) and Heiner Höltje (1978) prove that the construction principle and perceived spatial effect were of equal interest.

Hinrich Storch (1961) and Ulrich Hassels (1979) demonstrate that thoroughly designing construction in no way has to be at the expense of perceptive, occasionally humorous, visualization of projected uses: be it in the upper stage of the *Culture Center Salzgitter Lebenstedt* or in the laboratory wing of the *Synchrotron TU Braunschweig*.

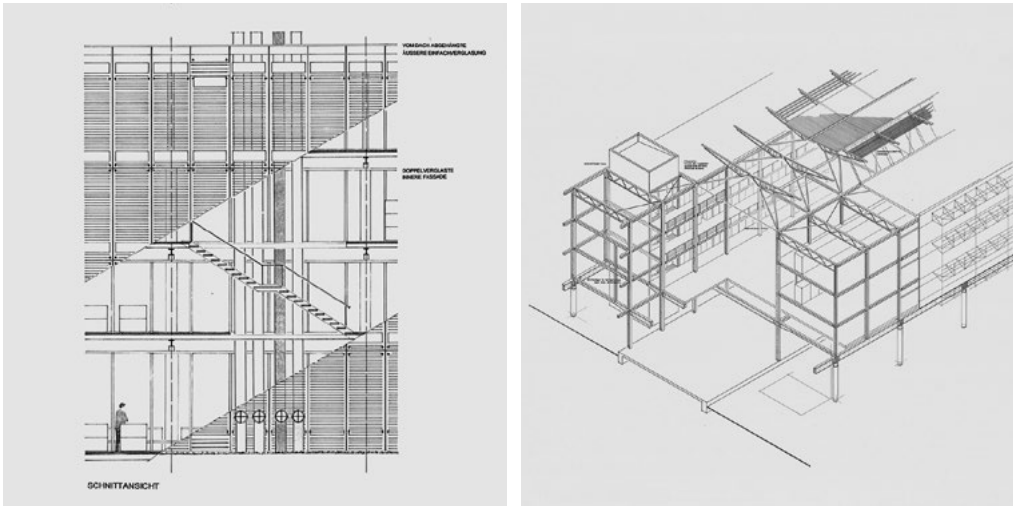
Architectural expression conspicuously coincides with a thorough constructive detailing on the facade. Both Stephan Worbes (1988) and Anke Westphal (1993) emphasize the artistic equality of elevation and section in their designs of two factory



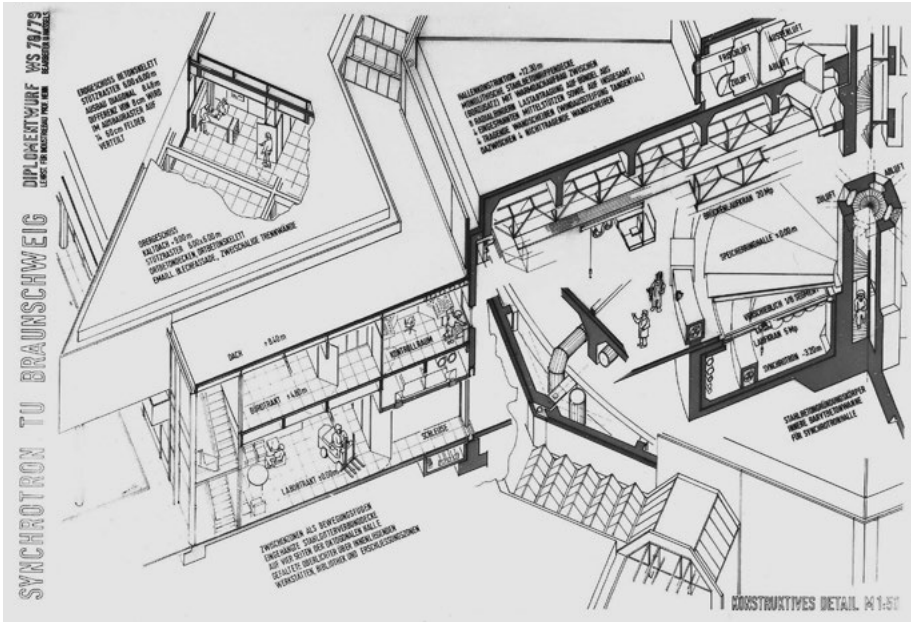
buildings. One of the biggest challenges in the development of friction-locking connections is also being able to anticipate and be spatially in control of complex geometries. Despite the triumph of CAD, laser milling, 3D printers and robotics, graphic solutions in particular are a testament to this fact in the form of detailed axonometries and 'traditional' model building. In 1991, Matthias Rätzel isometrically explains the construction principle of his *Publishing and Printing Building for the Magdeburger Allgemeine Zeitung*. Julia Gill and Jan Pingel resort to wood and cardboard to test out constructional assemblage, the assembly process, and the aesthetic effect of the Altonaer Train Station (*North Express*, 1997) and the *Frank & Frei Vineyard* (2008), – in miniature but with spatial authenticity [→X^N].

A prevalence of steel and lightweight construction assignments among the works presented here is also perhaps due to Walter Henn's prominent contribution to the development of steel construction [→INDUSTRY]. However, the range of topics and materials processed certainly extends far beyond. Lutz Käferhaus, for example, designs his *Spa House at a Bathing Resort* from 1967

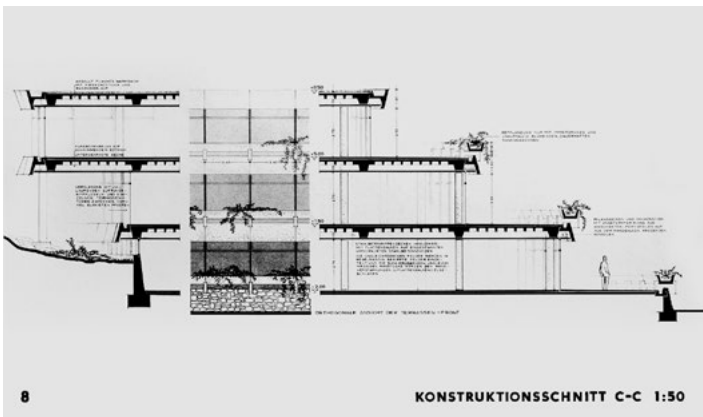
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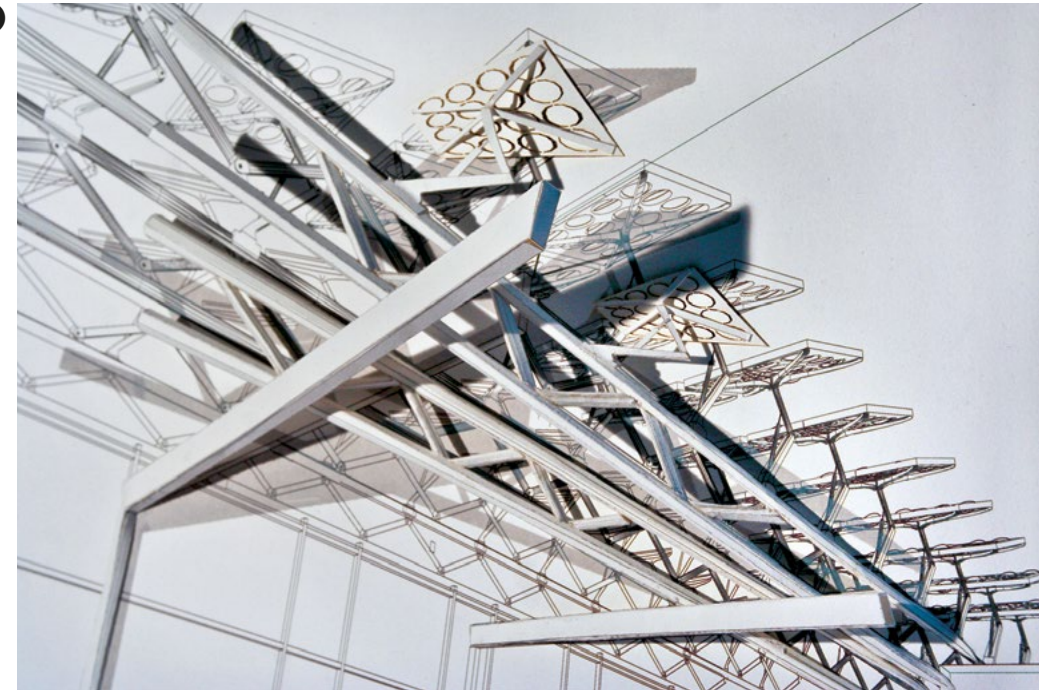
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with an attentive eye for details, including the bottom view of the proposed reinforced concrete ribbed slab, and accurately joins the roof face and planting basin made of prefabricated washed concrete parts into a harmonious unit.

We unfortunately do not have any works available from Professors Petersen, Kesselring, Schniete, Kristen and Herrenberger, who also advised Diploma designs in the subject groups construction, building materials science, industrial building and statics. Professors like Klaus Pieper or Berthold Burkhardt, though important for the Braunschweig School, did not assign any Diploma works (→CURRICULUM).

With the introduction of the →MASTER's, it is now possible to complete a degree with scientific analyses in statics and structural design. In 2004, Bartłomiej Jaroszewski becomes one of the first to take this approach with his work *Modeling of an Instruction Manual on the Documentation of Existing Buildings* under Professor Kloft. Architectural contributions to basic research in maritime production and energy production were sought after in 2016 for the development of an *Offshore Hub* under Professor Karch. Justin Gibbons, for the structure of his *Climate Mod Station* (→WATERBANK), puts the technical and constructional mastery of the sea to the test, very much under the banner of the Anthropocene.

- 1 Typescript statement by Braunschweig professors, dated 8.2.72, published in full as "Charter von Braun-Schweig" in the journal "Das Werk" (No. 4, 1972). Additional signatories of the publication: Kraemer, Lehmbruck, Oesterlen
- 2 Newspaper from the TU Braunschweig Architecture Base Group, Front matter of the issue no. 2, November 1970
- 3 Ulrich Hassels, Synchrotron TU Braunschweig, 1979, Prof. Henn, perspective view
- 4 Mirjam Blase, Ägyptisches Kulturmuseum (Egyptian Cultural Museum), 1984, Prof. von Gerkan, axonometry

"Know in advance that being an architecture student is not about being a learner, a master of subject matter, but about being open-minded, letting yourself be riled up. It's not about being someone who knows and can do everything, but about being able to ask questions and marvel. It's about being someone who is always curious and hungry, someone for whom every answer gives rise to new questions". That is how Friedrich Wilhelm Kraemer made the case for passion, a hunger for knowledge, and critical curiosity in his opening lecture for the 1952/53 winter semester.

Barely twenty years later, critical questioning becomes too much for Braunschweig professors. They now perceive their student's hunger for knowledge as insubordination. Though perhaps more moderate in Braunschweig than elsewhere, the denouncement of the belief in a "convergent universal industrial society" (Simone Hain) also shows up very clearly at the local university in the form of a controversy over the content of the curriculum and, in particular, on how and by whom it is to be determined.

To a great extent, though not without exception, the tension turned out to be generational. At the TU Braunschweig architecture department, it was predominantly centered on the question of whether architects should function merely as 'vicarious agents' in the process of planning and construction or whether they should

Aus gegebenem Anlaß stellt die Abteilung für Architektur folgendes klar:

Aufgabe des Architekten ist die bauliche Realisierung von Nutzungswünschen, die von der Gesellschaft oder von Einzelnen als Bauherren im Bauprogramm formuliert werden. Bei umfangreichen oder schwierigen Vorhaben kann ein Stab von Fachleuten - innerhalb dessen auch der Architekt seine Erfahrungen einbringt - zur Erarbeitung des Programms notwendig werden.

Die Tätigkeit des Architekten umfaßt in ihrem ersten Schritt das Entwerfen, das ist das Umsetzen der mittels Worten gestellten Aufgabe in Räume, die den geforderten Funktionen genügen, Formen, die der Gestaltungsabsicht der Zeit entsprechen, Konstruktionen, die Sicherheit und Dauerhaftigkeit gewährleisten, technische Ausstattungen nach den heutigen Forderungen und schließlich die Ordnung der Beziehungen zur gegebenen Umwelt.

Bei der Ausführung, dem zweiten Schritt seiner Arbeit, ist der Architekt Treuhänder des Bauherren, dem er die Umsetzung des beschlossenen Projektes in die Wirklichkeit gewährleisten soll. Dazu gehören: Organisieren des Bauvorgangs, Gewährleisten der Qualität, Einhalten der Termine, Erfüllen der Kontrollansprüche, Abrechnen der Kosten.

Mit dem Erwerb des dazu erforderlichen Wissens und Könnens ist der Architekturstudent während seines Studiums voll und ganz ausgelastet. Seminare, Kolloquien und Entwurfsarbeiten sind als Vorbereitungen und Übungsfälle zu betrachten. Maß der Architekt sich Urteile und Entscheidungen außerhalb dieser Sachgebiete an (z.B. in Soziologie, Philosophie, Psychologie, Pädagogik, Medizin, usw.), so muß er sich den Vorwurf des Dilettantismus gefallen lassen.

In der Diplomprüfung ist nachzuweisen, daß die für die Berufsausübung notwendigen Wissenszweige beherrscht werden. Vom Gesetzgeber ist den Universitäten die Aufgabe übertragen, mit dem Diplom für die Öffentlichkeit zu bekunden, daß seinem Inhaber Entwurf und Ausführung von Bauvorhaben anvertraut werden können.

Braunschweig, den 8.2.1972

gez. Bruckmann	gez. Henn	gez. Pieper
gez. Gockell	gez. Herrenberger	gez. Rücke
gez. Gosebruch	gez. Kulke	gez. Weber
gez. Hecht		

already contribute their social responsibility to the development of the planning stipulations. The positions of the students, assistants, and professors diverged significantly on the topic.

In 1972, thirteen Braunschweig architecture professors signed a "Charter of Braun-Schweig" (sic!) published in the newspaper *Das Werk*. Here, they made plain what they understood to be the task of contemporary architecture "in light of recent events". The stone that really got the Braunschweig debate rolling was the lack of approval for a so-called "telephone book design" Diploma.

Works primarily examining the conditions and requirements of a design topic at the textual level were disparagingly



referred to as “telephone book designs”. Plans, diagrams, and even models were more the exception back then. For the professors, perusing this type of work had the same appeal as leafing through a telephone book.

Ute Lübke’s *Model for a Leisure Center in the Harz* (under Prof. Jelpke, 1970) is one such work. Lübke reflects on the psychological and socioeconomic conditions of “leisure time”, and attempts to develop the fundamental demands of a local recreational landscape based on these considerations. Officially i.e. in the above-mentioned charter that meant: “Should the architect presume to make judgments beyond these fields (i.e. the design and execution of structures, MP), then he (sic!) will have to accept the accusations of dilettantism.” This especially applies to Wibke Thon-Dreessen’s *kleinkinder in salzgitter* (infants in salzgitter, under Prof. Bruckmann, 1971). This work was the example with which the signatories of the charter ultimately wanted to expel such dilettantism from architectural training once and for all. Its subtitle was: “materials on the political economy of pre-school education particularly in industrial towns like Salzgitter. consequences of the change. approaches to spatial planning.”

The dilettantism accusation can not entirely be denied. And how should it have been otherwise when there was no established place in the faculty for the sociology or even psychology of architecture back then? It was the urban planning lectures of Kristiana Hartmann, who arrived in 1980 to succeed Jürgen Paul on the Chair of Building History and Urban History that he had established, which first systematically thematized the sociological aspects of planning history as well. In 2001, Karin Wilhelm, whose teaching program made the history and theory of architecture and the city discernible as an overlapping field of discourses and developments in aesthetics and technique, socio-culture, policy

and the history of ideas, was appointed from Graz to succeed Hartmann. Since 2018 Prof. Tatjana Schneider’s Institute of History and Theory of Architecture and the City decidedly dedicates its research and teachings to the investigation, analysis and documentation of the politico-economical frameworks and their tension with ethical demands for architecture and architects in the context of a new civil society.

In his article „Bauen, nicht denken. Der ‚Braunschweiger Weg‘, Architektur zu studieren (Building, Not Thinking. The ‘Braunschweig Way’ to Study Architecture)”, which appeared in the 10 March 1972 edition of *Die Zeit*, Manfred Sack impressively analyzed how the Charter of Braunschweig was not the right response to the students’ need to contest the ‘order of things’ in the profession. In fact, according to Sack, a retreat to the so-called core competencies of the architectural profession was not only an anachronistic half-truth in 1970, but also at all times. Wibke Thon-Dreessen did not let herself be dissuaded from her approach. In the fall of that year, she completed her studies with a work on the city development of Hildesheim. This time she was armed with ‘proper’ plan material, which the then still exclusively male professorate would not be able to object to [→Y-CHROMOSOME].

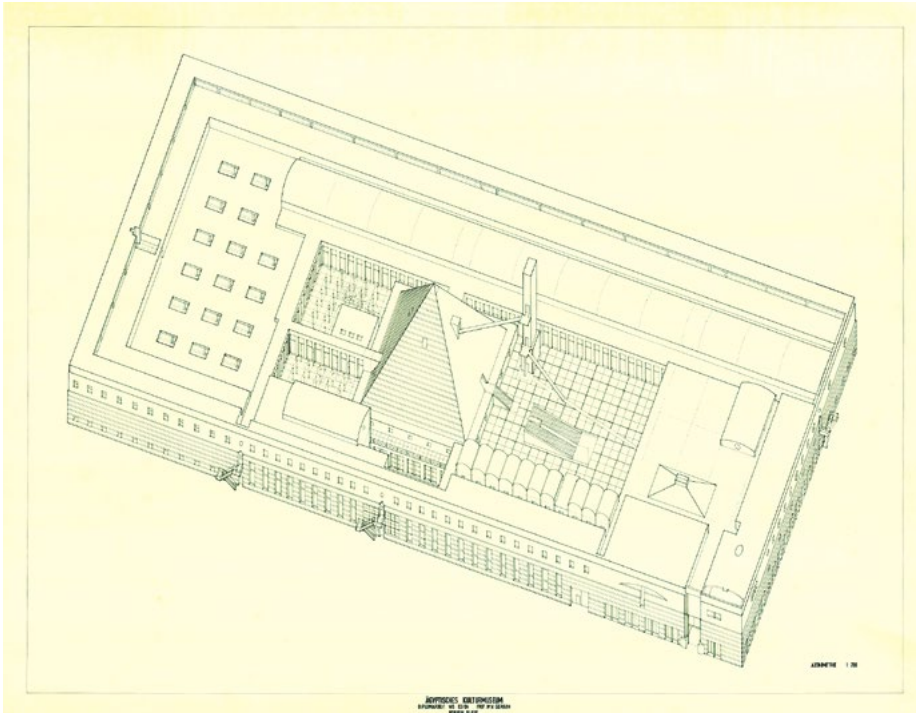
In the following decades, however, the quantum of analysis in the Diploma works significantly increased even in designs for building constructions [→QUANTITY]. Since then, and with the introduction of the Master’s program in the 2010 winter semester, it is basically possible to complete a degree in all the departments [→CURRICULUM]. The spectrum of topics deviating from conventional building construction design has also grown significantly, culminating in the additional Master’s program in sustainable design (since 2012) initiated by M. Norbert Fisch (then Prof. for Structural Physics and Building Services Engineering).

There was tension in that epoch, but not just around the relationship between theory and practice in the course of studies. The routine business of architects teaching in Braunschweig also became the focus of criticism. The plans for Ulrich Hassels’ *Synchrotron* (1979) bear witness to this. Once it came to light that his supervisor Walter Henn was involved in the nuclear repository planning at Gorleben, nuclear energy opponents boycotted his lectures. Hassels suspects that the Diploma assignment to design a particle accelerator was Henn’s response to these hostilities. A response which Hassels in turn skillfully and cheekily commented on with placing the image of Einstein sticking out his tongue in the center of his plan.

3



4



Since then, the controversies between educators and students have hardly become so vehement. The protests in the nineties focused on the department's facilities and the general conditions of the course of study within the mass business of the university [→ZEICHENSAAL].

There are of course controversies with regard to the assessment of final Diplomas, especially when it comes to creative performance. Indeed, the tightrope walk between appropriation of masterful solutions and plagiarism is difficult. However, in hindsight this hardly relates any less to designs from the 1950s, which we so clearly believe to be from the “Braunschweig School”, than to the formative power of star architects since the 1990s, for instance. At any rate, it should seem strange to us nowadays that Mirjam Blase's *Egyptian Cultural Museum* (1984) aroused suspicions of plagiarism [→VACUUM]. Her obvious reference to the Step Pyramid of Djoser complex, which was consciously worked through in the layout and in the facade as a (post) modern museum, apparently provoked a controversy between the professors involved with regard to the autonomy of the design. Instead of taking a compromise grade, Mirjam Blase decided to do her Diploma again the following year.

Since switching the architecture Diploma program to a Bachelor and →MASTER'S program, the term “Studierbarkeit” (“studyability”) has been tossed around. Students complain that the credit points, calculated on the sum of a student's lifetime spent in the program, are not a reliable hard currency but rather arbitrary, depending on the demands of the institute, – sometimes more expensive and sometimes easy to purchase. The teaching staff, on the other hand, complain about this peddling on the part of students, from whom they nowadays can barely expect performance out of pure interest and without compensation in the aforementioned ‘currency’. Apparently, the new courses of study, the result of the Bologna process, are more often perceived by the Braunschweig architecture department as a corset than a perfect fit. The opponents in this conflict, however, are hard to find inside the department and thus much harder for those involved to address.

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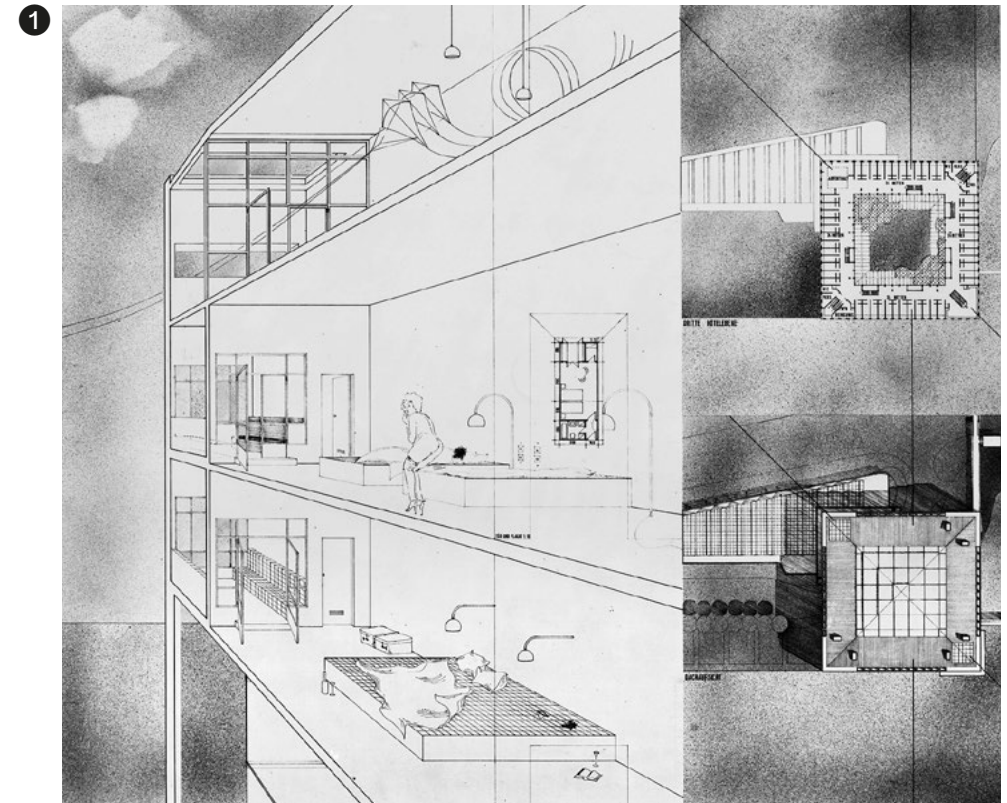
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USE

- 1 Bernhard Gössler, Conference Hotel in Kiel, 1980, Prof. Wagner, perspective view of section
- 2 Ulrike Knauer, Healing Architecture, 2016, Prof. R. Schuster, perspective view „Nebel“ (fog)
- 3 Walter Ehlers, Entwurf für ein Einkaufszentrum (Design for a shopping center), 1962, Prof. Oesterlen, perspective view of the interior
- 4 Hinrich Storch, Cultural Center Salzgitter Lebenstedt, 1961, Prof. Oesterlen, perspective view of the auditorium
- 5 Hans-Joachim Witt, Fluggast-Abfertigungsgebäude (passenger terminal building) in Hannover-Langenhagen, 1964, Prof. Kraemer, perspective view of the interior
- 6 Simon Banakar, Deutsches Tapetenmuseum (German Wallpaper Museum) Kassel, 2013, Prof. Penkhues, perspective view of the interior
- 7 Anika Neubauer, Estación Valdivia, 2013, Prof. Kiefer, collage
- 8 Hans-Hermann Krafft, Cine Città, 1989, Prof. Auer, “aquarelle”
- 9 Rüdiger Stauth, Entwurf von Stationen zur Darstellung von Stadtbaugeschichte. Ein Ansatz zur Definition eines stadtbaugeschichtlichen Museums (Designing stations for the presentation of urban planning history. An approach to the definition of a museum of urban planning history, PhD thesis), 1991, Prof. Ostertag, analytique

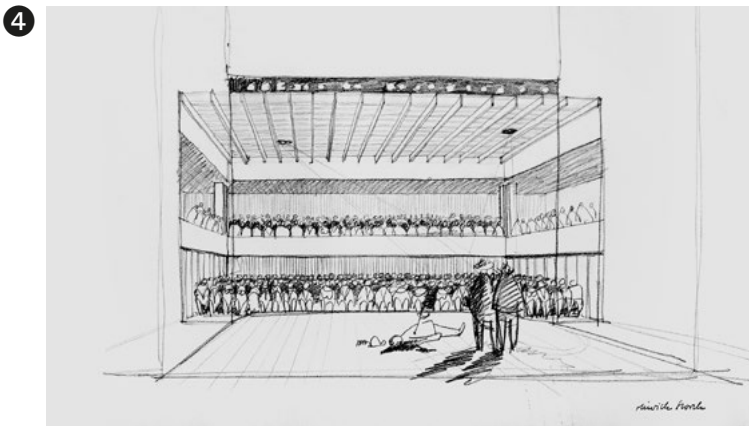
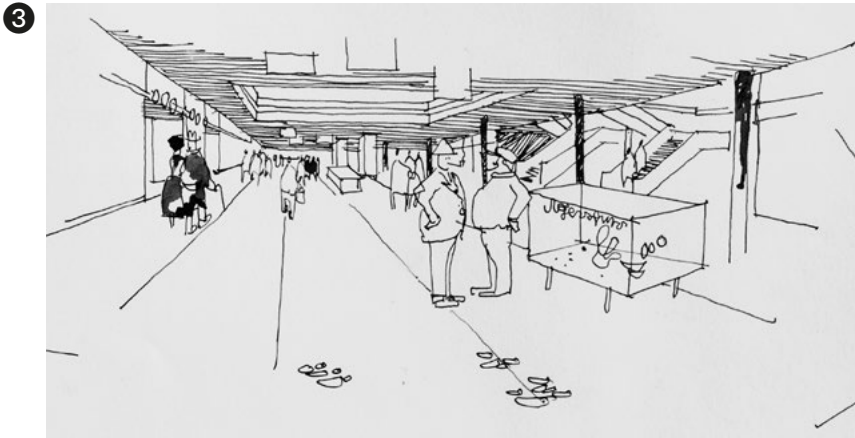
Every design rendering is an attempt to make the unbuilt visible before its realization. However, unlike true-to-scale layouts and elevations, cross sections and axonometries, which primarily depict the design for its technical implementation, the perspective view strives to create atmosphere and vicarious experienceability. In this chapter, “use” thus functions as an umbrella term for attempts at visualization that focus on the human being as a user of an “atmospheric space” (Gernot Böhme). In her Master’s thesis *Healing Architecture* (2016), Ulrike Knauer explicitly takes up these ideas and designs “atmosphere(s) of light, color, and materials with their sensory qualities, which evoke touching and feeling” (Knauer).

The visualizations transfer those who view the design into the atmospheric space in different ways. Bernhard Gössler for instance grants us a glimpse behind the facade of his *Conference Hotel in Kiel* in 1980 and directs us – of all places – to the guest rooms with rumpled beds and a nude female, putting on an earring. Equally narrative in style are the pen and ink drawings, which Walter Ehlers uses to help breathe life into his *Design for a Shopping Center* (1962). The gentlemen relishing a smoke in closed spaces may serve as a symbol to us of a bygone era, or perhaps also as a covert allusion to the pleasure and addiction of shopping. Dashing students in the foyer of the academic founda-



tion (Udo Gebauhr, 1976) and the theatrical murder performed in front of a sold out house (Hinrich Storch, 1961) also speak of the appropriation and performance of spaces, which yet exist only in perspective drawings.

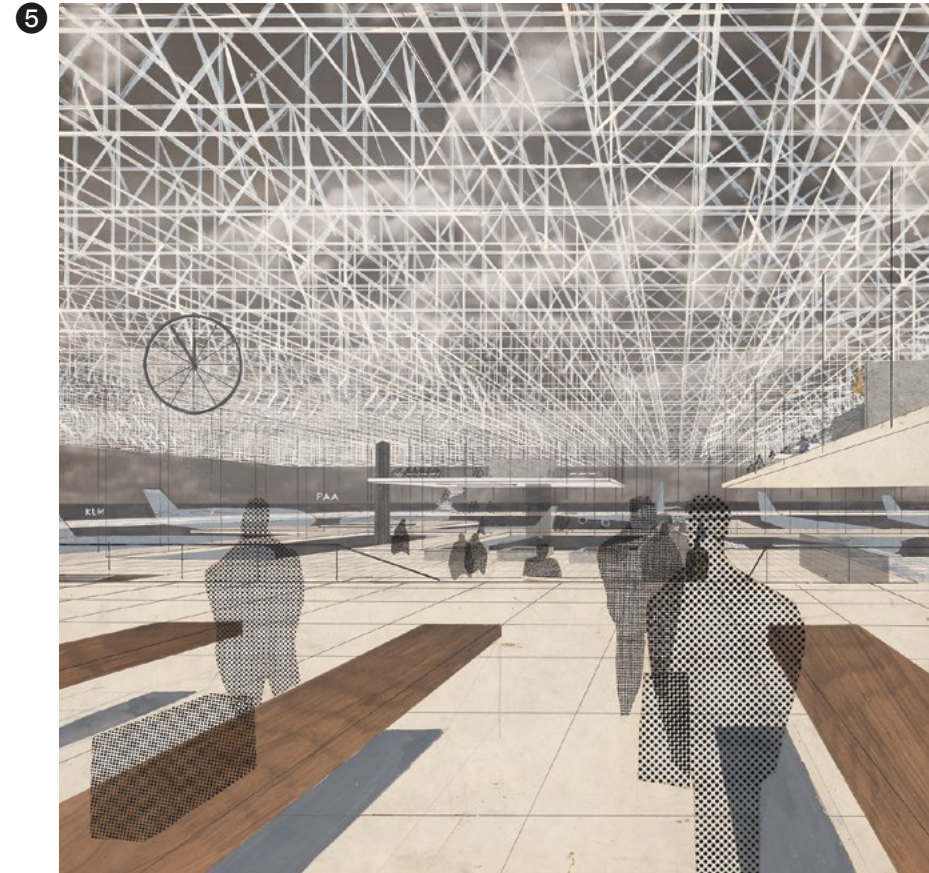
For Simon Banakar, the surfaces come to life. With the help of a computer, he allows for a naturalistic anticipation onto the material and incidence of light in his design for a *German Wallpaper Museum Kassel* (2013). Hans-Hermann Krafft first develops the play of lights for his *Cine Città* with oil on canvas as a dramatic painting of the atmosphere in a cinema house [→LAB COAT]. Finally,



Sven Wesuls draws on isometry as the technical visualization of what is to become. However, he bursts beyond the frame of the drawing pad in his collage and thus allows his design to escape the sheet of paper (x^2) and enter into the realm of our imagination [$\rightarrow x^N$]. Hans-Joachim Witt is already relying on the suggestive power of abstraction in 1964. Following hazy passengers, our gaze makes its way under the wide roof of the passenger terminal at Hannover-Langenhagen Airport [\rightarrow FLUGHAFEN].

Marc Aurel Jensen's drawings from 2007 are playfully descriptive. The gaze of the viewer is drawn up and down the *Vertical Village* to a number of pictograms and room sketches: down the balustrade, following the soapboxes, into the Neufert Data for an exemplary functional kitchen. In 2013, Anika Neubauer focuses on the essential elements of her landscape architecture design for the *Estación Valdívía* in a series of sketchily collaged perspectives, which she sends as postcards from the future back home to the institution that awards her Diploma.

Astrid Bornheim in her *Monument Landscape Peenemünde* (1998) chooses an unconventional path of representing atmosphere.



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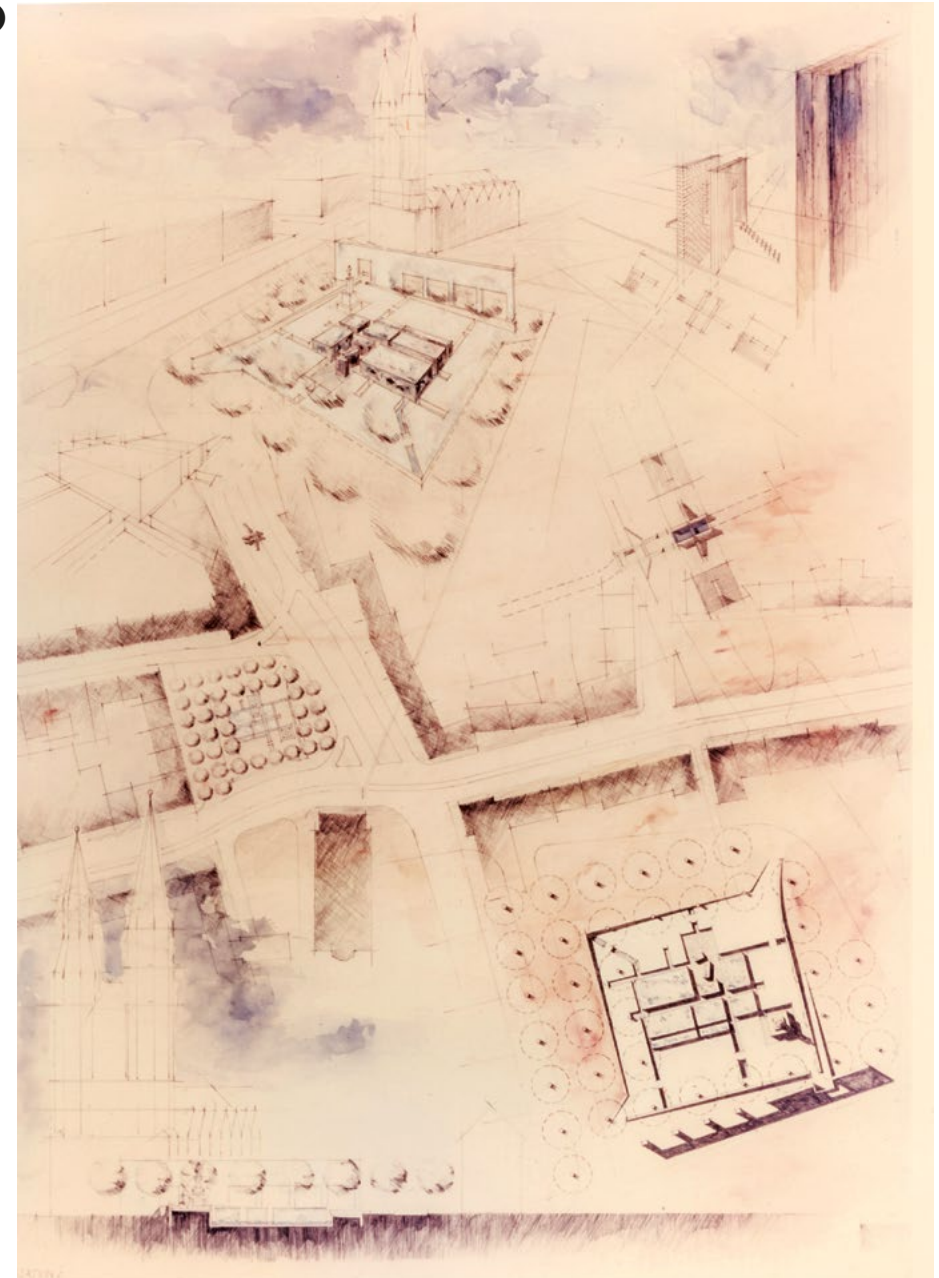
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While presenting her Diploma, she carries us off into the non-material atmospheres of the landscape she conceived, instead of building on the suggestive power of drawing alone. In an installation approximately described as a “lightroom”, she projects the design drawings with a slide projector onto an array of colorful silk screens and glass plates. Through the overlapping and penetration of image and color, light and time, an atmosphere of experienceable ‘maps’ arises, a dialectic re-configuration of the projected reality.

Rüdiger Stauth also designs a map in his 1990 attempt to conceive of a museum of urbanization and urban planning. In this rare case of a dissertation, which combines design and scientific analysis, Stauth updates the presentation format “analytique”, a technique from the 19th century which superposes constructive drawings and views into a full picture of the architectonic intention. Along a trail of stations representing urban history in Braunschweig’s urban layout, shifting views onto designed public spaces and ensembles of buildings open up unconcerned with

9



the correctness of scale or perspective. It is solely the gesture of the hand as an artistic equivalent to the construction of spaces of remembrance that is of significance here [→HORIZON].

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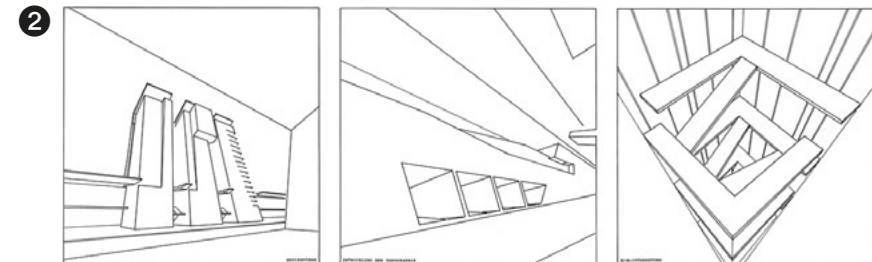
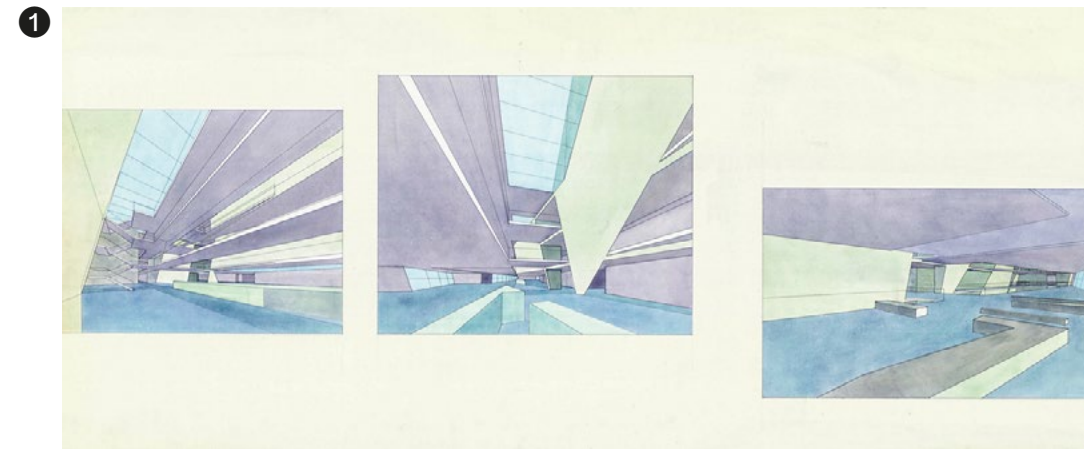
VACUUM

- 1 Tobias Amme, Sanatorium on Usedom, 1992, Prof. von Gerkan, perspective views
- 2 Christiane Kraatz, Verlags- und Pressehaus. Medienwerkstatt (Publishing and Press House. Media Workshop), 1992, Prof. Ostertag, perspective views

As with the written word, drawing is also about the art of knowing what to depict and what to omit. The addressee is always the imagination of the viewer, the ability to derive meaning from the implied.

We assign the architectural drawings of the Braunschweig graduates to two poles: the “Vacuum” and the →USE. Both terms are to be understood metaphorically. With “Use” we refer to drawings that strive to depict as vivid a simulation as possible of how the designed spaces would be experienced – optically, physically, and atmospherically. In comparison, there are drawings whose graphicness is primarily directed towards the intellect.

Axonometry plays a central role in the concept of architecture of New Objectivity and has been influencing design for buildings up until present. Thilo Hilpert suspects this has to do with a past widespread rejection of ‘pictorial’ awareness of space. “The oblique image is not meant to provide spatial impact. Instead, it’s meant to illustrate how a structure consists of volume and constructive elements, how space is just defined by them.” In the process, the non-architectural world – surroundings, people, nature – are in most cases disregarded. Its character rather cool even when color is used. This way the eye of the beholder becomes a supernatural eye so to speak – one that only exists in the imagination. In this sense, Mirjam Blase’s design for an *Egyptian Cultural Muse-*



um in Cairo is placed in a vacuum. One in which the many allusions of the design can unfurl that much more intensely. Despite the delicate coloration, the precision of the drawing conveys a coolness, almost as if it is an attempt to counterbalance the post-modern nostalgia of the design concept. Though it is hard to understand today, the author brought forth an accusation of plagiarism since it is based on the Pyramid of Djoser complex [→TENSION].

We also include perspective drawings here – somewhat stretching the keyword “Vacuum”- whose level of abstraction from the material also primarily addresses the intellect. Like the interior perspectives for Susanne Janssen’s *City Center Dresden* (1996), Tobias Amme’s *Sanatorium on Usedom* (1992) or Christiane Kraatz’s *Publishing and Press House. Media Workshop* (1992).

The 80s and 90s were evidently the high point in Braunschweig for positioning the drawing-in-a-vacuum advantageous to experiments.

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Philipp, Klaus Jan: *Die Axonometrie als symbolische Form. Architekturdarstellung als visualisierte Theorie* (Axonometry as a Symbolic Form. The Architectural Drawing as Visualized Theory), Hamburg 2008.

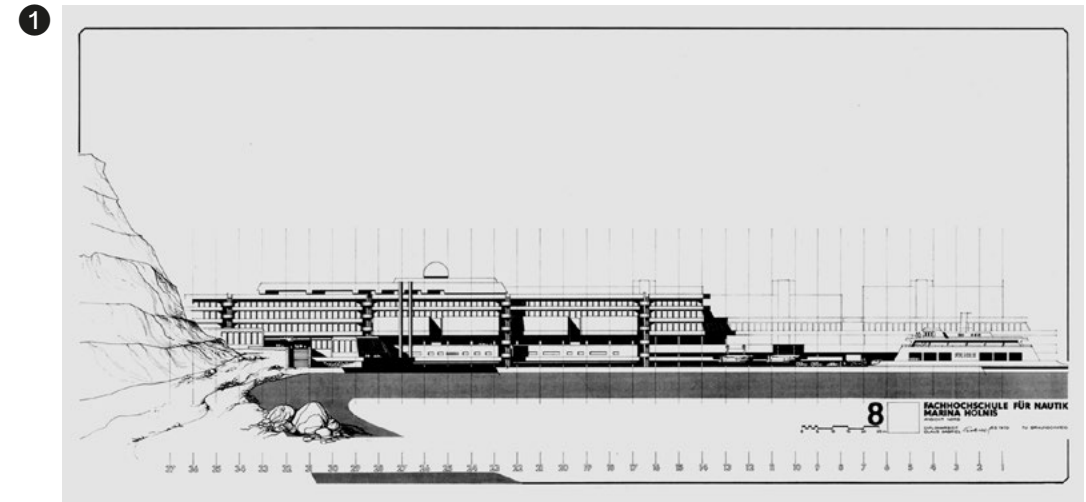
WATERBANK

- 1 Claus Gabriel, Technical College for Nautical Sciences Marina Holnis, 1970, Prof. Kraemer, elevation from the north
- 2 Dirk Terfehr, Maritima. Forum Küste (Maritima Coast Forum), 2013, Prof. R. Schuster, perspective view with jetty
- 3 Hannes Hoßbach, Jules Vernes Zentrum für Ozeanforschung und Tiefseerobotik (Jules Vernes Center for ocean research and deep sea robotics) St. Nazaire, 2013, Prof. Penkhues, perspective view of the production chambers
- 4 Justin Gibbons, Climate Mod Station: Offshore-Hub/maritime Pilotarchitektur, 2016, Prof. Karch, perspective view
- 5 Andreas Symietz, Civic Center in Riga, 1997, Prof. von Gerkan, site plan
- 6 Anne Kettenburg, Seestadt (Maritime City) Bremerhaven, 2014, Prof. Kiefer, collage

In the past, structures were primarily built along the water to exploit it as a resource: water as energy, as a raw material, as a transport route. However, since time immemorial the design of such sites has also been seen as appealing. They enjoy everyone's full attention thanks to their spatial and ambient uniqueness. When perusing our final theses – Diploma and Master – we realized that it was not merely the position on the water but also the threshold, the transition from land into water, from solid into fluid, from matter into light, which seemed to especially inspire the imaginations of teachers and students [→HORIZON].

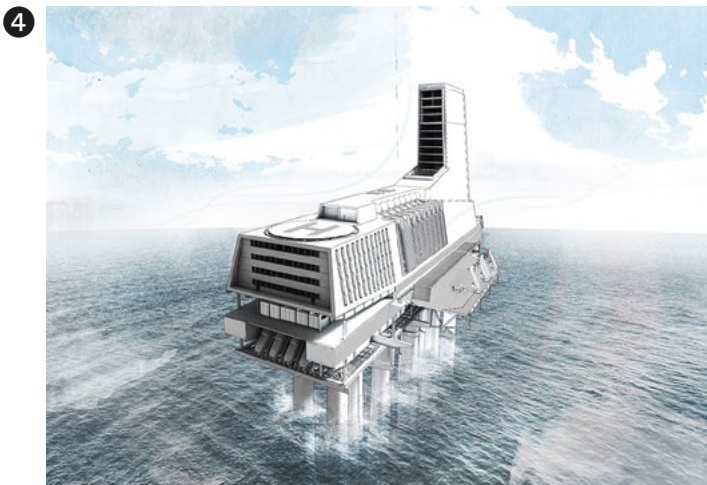
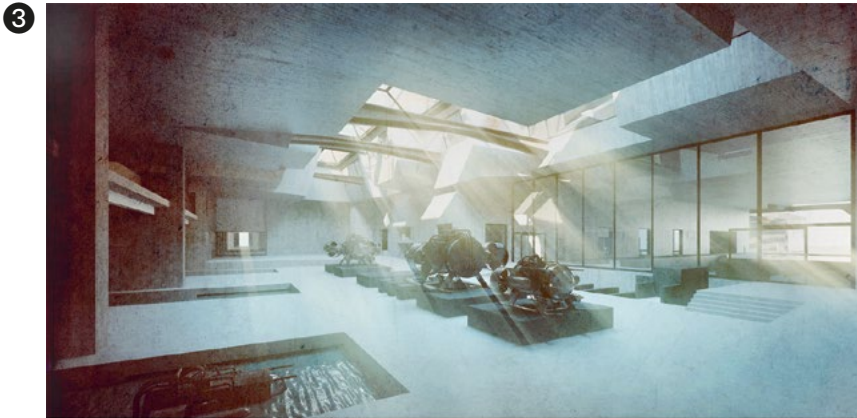
The design of a *Technical College for Nautical Sciences* on the German Baltic Sea coast by Claus Gabriel (1970) finds an impressive image for this threshold, the 'waterbank'. It is an artificial peninsula on which a pier for ferries with a promenade and cafe, the school building itself, and residences for students and teachers are situated [→MEGA]. "In a sense", writes Prof. Kraemer in his assessment, "it is a multi-functional 'steamer' anchored on land". The grandiose contrast between the technical artifact and the amorphous coastal cliff is also presented in suggestive detail in the drawings.

Ten years later, Bernhard Gössler's *Conference Hotel* is heaved out of the Kiel Fjord. Here, too, the contrast between sharp architectural shapes and a diffusely lit atmosphere gain appeal,



especially thanks to the presentation technique. The paint was applied with toothbrushes "scrubbed down over a sieve" in order to blot the empty spaces on the sheet with pigment in varying layers of thickness [→LAB COAT]. This 'erotic action' on the medium is mirrored in the decision to portray the conference center's hotel bed rooms in a state of →USE.

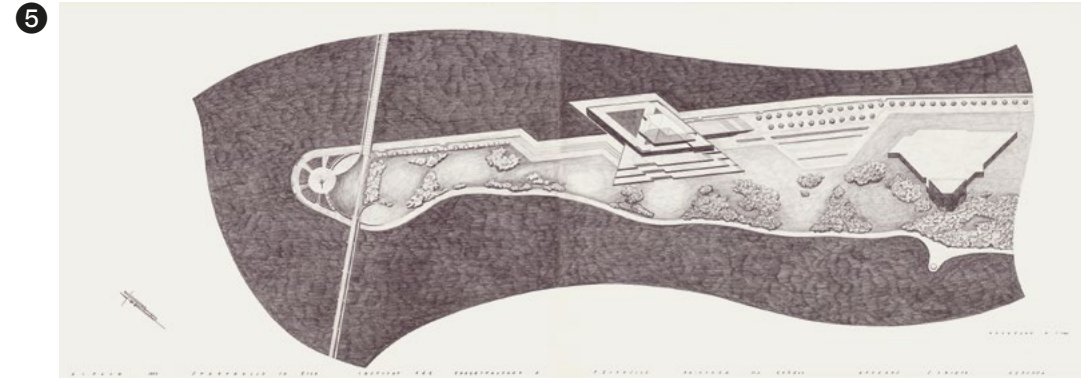
Whereas the special feature of Gössler's and Andreas Symietz's design (*Riga Civic Center*, 1997) meant to highlight the situation of the waterbank emphasized by charming traces of craftsmanship, the last ten years have witnessed the success of computer-generated drawings with astounding illusionistic effects. Dirk Terfehr's *Maritima Coast Forum* (2013) design concept is to determine a manmade waterbank (jetty) in an amphibious intermediate world. His design perspectives accentuates the sensuality of the construction of the architectural bodies and interior



spaces arranged along the jetty. The world of artifacts creates a play of optically and haptically delightful surfaces together with the tidewater landscape.

The situation of Hannes Hoßbach's *Jules Vernes Center for Ocean Research and Deep Sea Robotics* (2013) on the flowing landscape of the tidal flats is the starkest possible contrast. With the reconstruction and expansion of the World War II submarine bunker in the St. Nazaire harbor, the author dives thematically below the waterbank so to speak. The central design concept is a "dynamization of the massive concrete ceiling by means of an artistic rift along the only lateral axis of the building. This intervention formally uses the plate tectonics of the Mid-Atlantic Ridge, one of the primary deep sea research regions, as an example" (Hoßbach).

Far out into the ocean, Justin Gibbons shifts the 'front' of architecture against the water, both formally and structurally, in his highly demanding thematization of the role of architecture in the Anthropocene with his *Climate Mod Station* (2016). On the one hand, the resilience of the marine platform against natural forces



is impressively and entirely staged as a technological contrast. On the other hand, this research ark is characterized by a cooperative rather than exploratory reconception of technology.

The beauty of images is not the focus of Anne Kettenburg's Master thesis from 2014. She opens a discursive and fantastical space by making use of various written and image media: (fabricated) qualitative social research, environmental research reports, product fact sheets, information graphics, collage, and scenario models to tell the story of *Maritime City Bremerhaven* from the year 2243 [→QUANTITY]. She guides us into an "entirely normal life", one that is neither utopic nor dystopic, on and in the waterbank of a world marked by future climate catastrophes [→EUTOPOS].

FURTHER READING

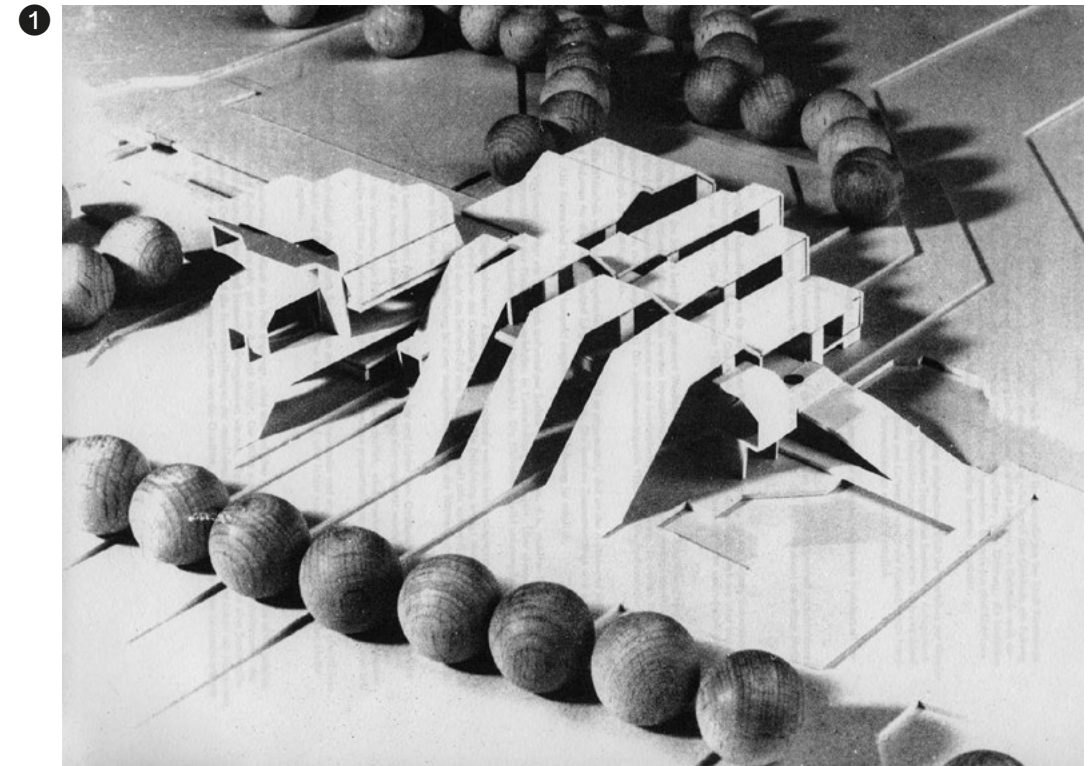
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Hölländer, Hans: *Spiegel und Grenze. Wasser, Architektur und Malerei* (Mirror and Border. Water, Architecture, and Painting), in: Daidalos, 1986, 20, pgs. 36–53.

- ① Friedrich Pramann, Kulturzentrum für eine Stadt im Mittelmeerraum (cultural center for a city in the Mediterranean), 1970, Prof. Kraemer, model
- ② Simona Schröder, Kultur.Raum. The Amsterdam Centre for Cultural Heritage and Identity, 2016, Prof. Karch, studies of building types
- ③ Martin Franck, 5th Construction Phase of the German National Library Leipzig, 2016, Prof. Karch, "hourglass"-models depicting three historical stages of the site from 350 BC to the present day
- ④ Wolfgang Wiechers, Einrichtungen der Altenhilfe in Braunschweig. Ein Beitrag zum Wohnen alter Menschen in der Stadt (Senior assistance facilities in Braunschweig. A contribution to the housing of elderly people in the city), 1971, Prof. Kraemer, model
- ⑤ Fabian Busse, Brooklyn Navy Yards. Urban Sprout, 2013, Prof. Grüntuch-Ernst, model
- ⑥ Jan Pingel, Weingut (vineyard) Frank & Frei, 2008, Prof. Roth, detailed model of wine tanks
- ⑦ André Poitiers, Greenpeace Base Hamburg, 1989, Prof. Ostertag, model
- ⑧ Oxana Krause, Magiczny Plac – Stadthaus (town hall) Krakau, 2003, Prof. Szyszkowitz, model

Three-dimensionality (x^3) – provocatively put – often comes up short in architectural education. This does not mean that architecture is not based on spatial thinking and does not find its worthy representation in two-dimensional plans (x^2) [→USE]. But for building in the actual sense, i.e. the joining of spaces *in* space, the students usually only come during office or, better yet, building internships. If this happens at all during their course of studies. Within the TU Braunschweig, the place to experiment with materiality, space and time is to be found in the Uhlenbusch, far away from the design chairs. However, the Institute for Architecture-Related Art (IAK) located there is still not entrusted to regularly assign final theses. The tangible 'building experience' demonstrated by the end of the course of studies is as such primarily created in miniature in the →ZEICHENSAAL or in the outstandingly equipped model workshop.

Presenting the architectural object on a tablet is only one of the tasks of the model. Cutting and pasting, milling, sanding, and mounting are not only conducive to the creation of a flawless presentation model, but also to the search for and solution to architectural questions: designing a model, be it with an analog or digital process, is an essential way to draft and examine spatial mindscapes. It is through working on the material that Tim Unne-

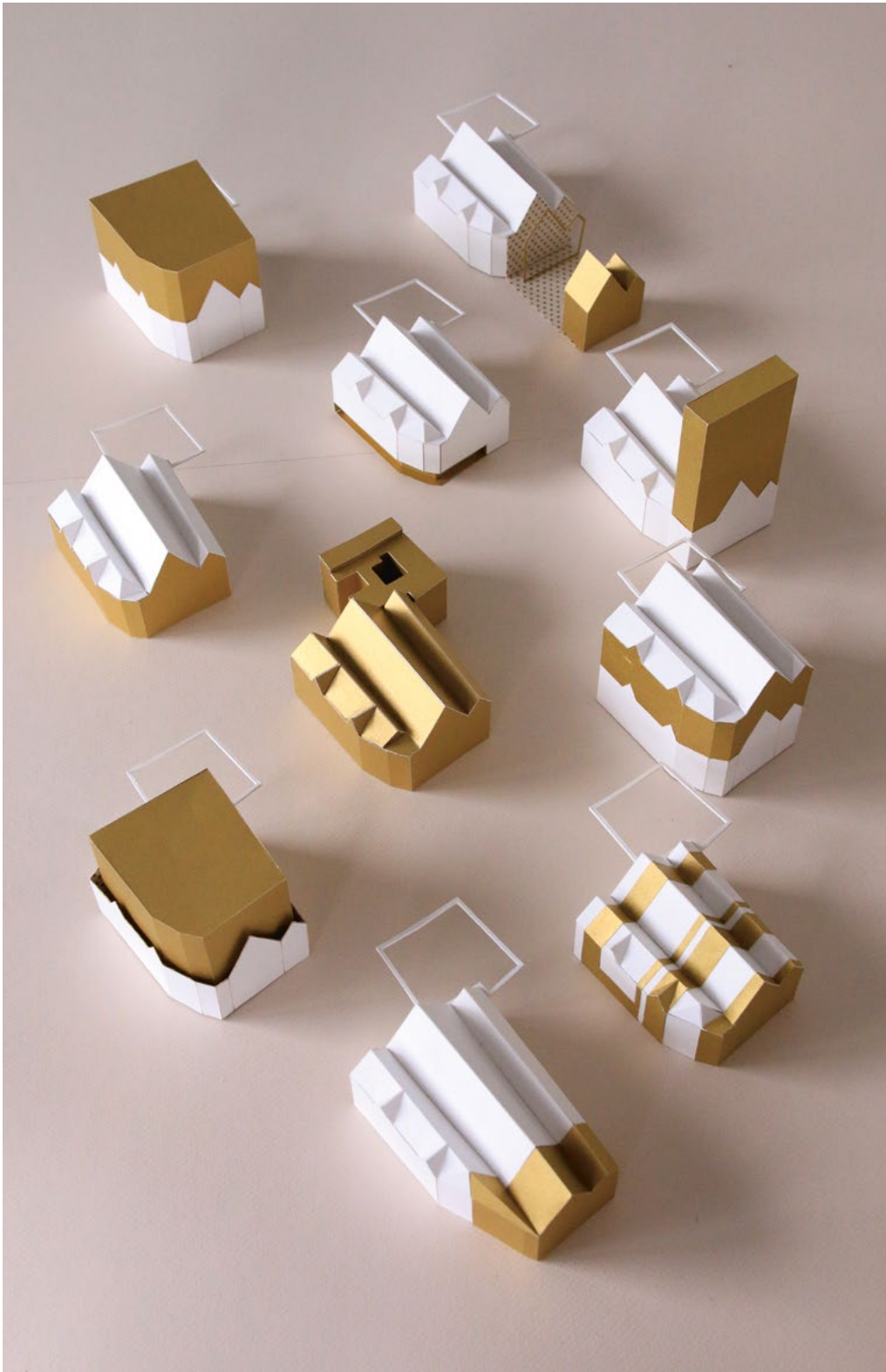


brink, for example, joins and breaks the composition of his *Cultural Bridge in Görlitz/Zgorzelec* (2005). And Friedrich Pramann also folds his cultural center for a city in the Mediterranean in a model, strip by strip, away from its surroundings. Simona Schröder (*Kultur.Raum. The Amsterdam Centre for Cultural Heritage and Identity*, 2016) initially uses the possibilities of model making to question the relationship between new and old buildings in expression and dimension before tackling the fine-grain of the composition.

The abundance of production techniques, materials used, and representational intentions is remarkable: Carsten Zillich (1968) examines the vertical graduation of his *Extension of a Mid-Sized Town Wolfsburg* by means of the urban development mass model [→OVERSPILL TOWN] and Wolfgang Wiechers (1971) furnishes proof of the structural embedding of his *Senior Assistance Facilities* in an environmental model.

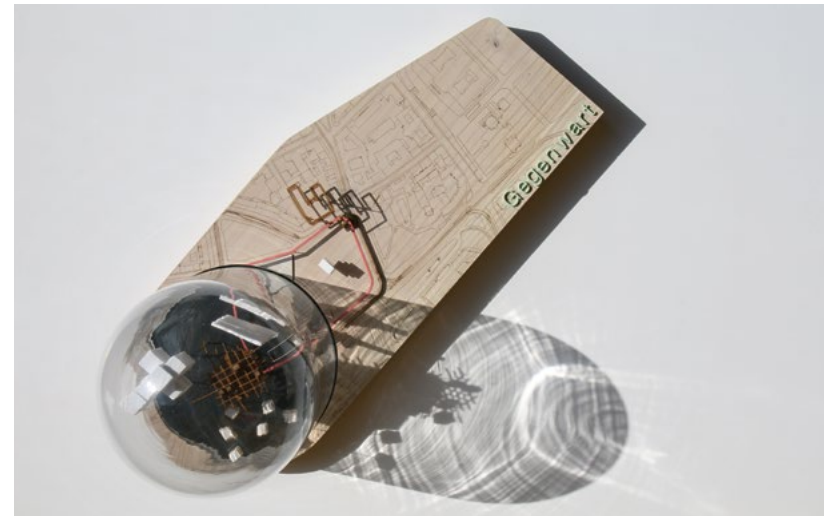
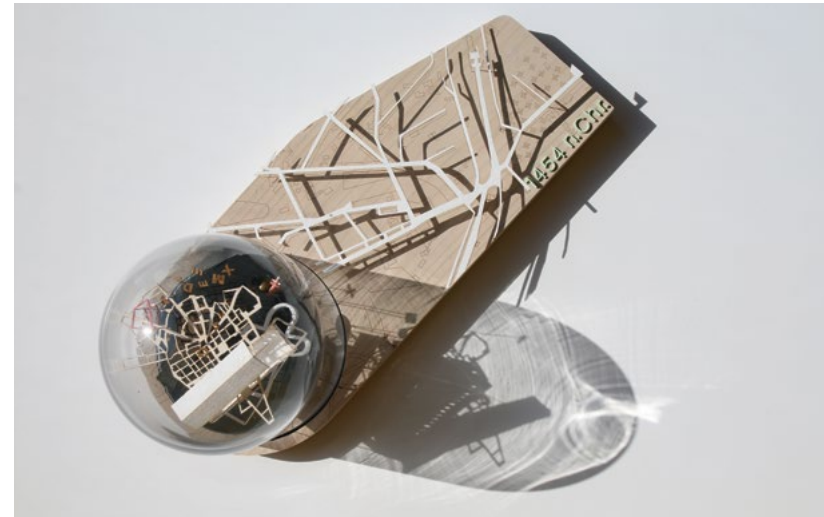
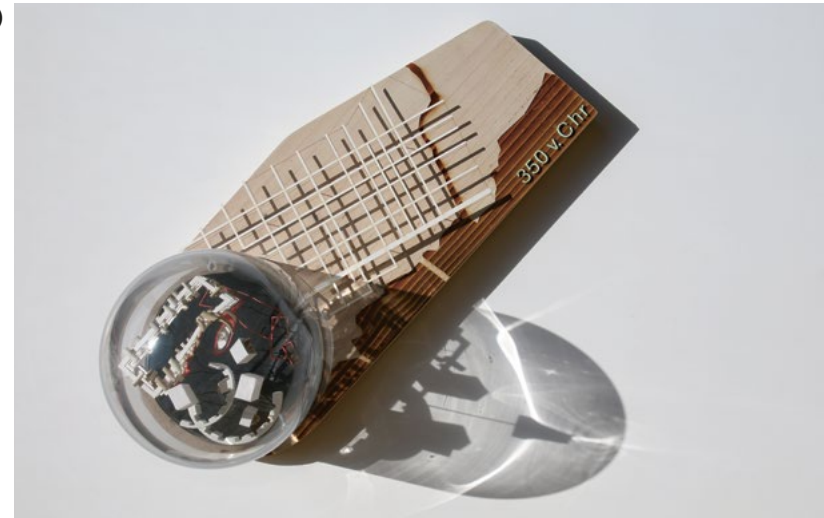
Fabian Busse (2013; →Q-BE) demonstrates his structural design as well as the use of his intervention on the *Brooklyn Navy Yards* employing a large-format sectional model, while Jan Pingel (2008) anticipates the organic-seeming wine cocoons of his *Frank & Frei Vineyard* with vivid perfection in a detailed model of reality. Expression and proximity to reality in 3D work indicate changing technical tools as well as different emphases with regard to the

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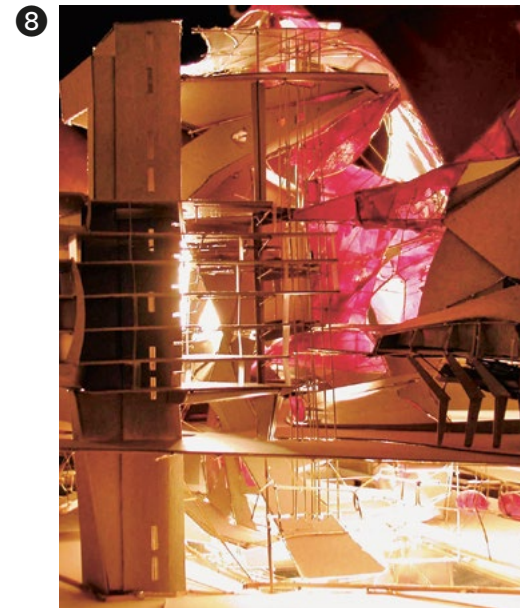
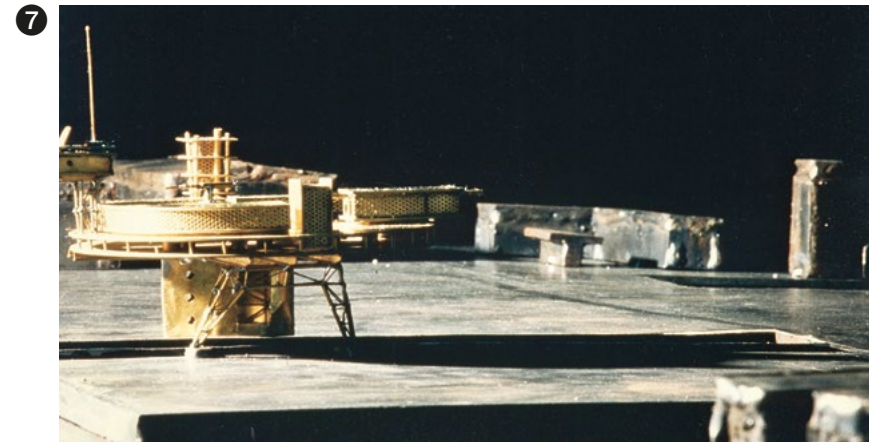
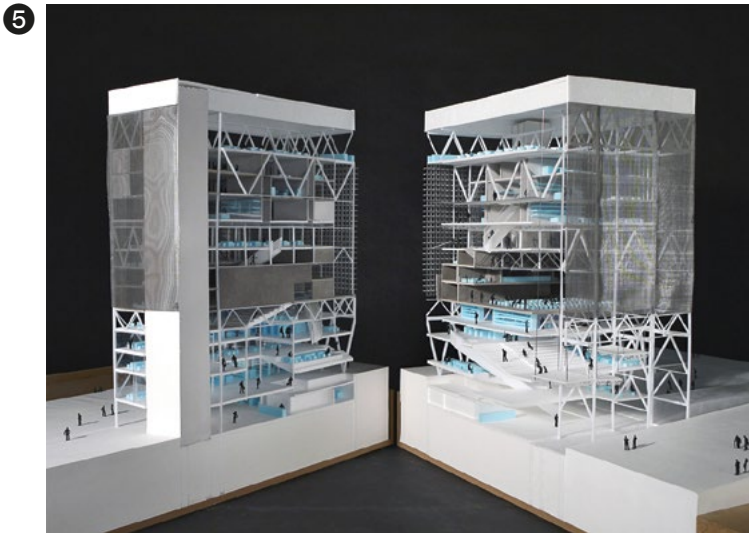
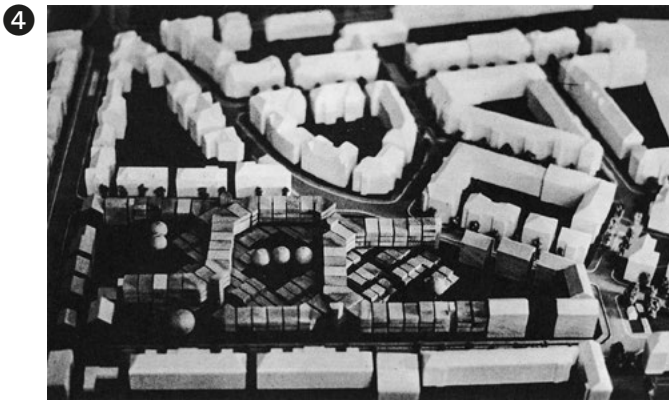
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3



159

X^N



respective content to be communicated or specific artistic demands. They are also an indicator of changing requirements to the scope [→QUANTITY] of the final thesis.

The models by Oxana Krause (2003) and Julian Busch (2007) capture the viewer's attention as objects of extraordinary expressiveness. They lend independent artistic expression to the designs speaking through them.

Alexander Butz makes the model making process itself a topic: in a video documentary (x⁴) on his 2007 Diploma, he uses quick motion to show how his *FilmKultur Forum Zagreb* grows upwards from the desk and as such now also simulates the assembly and construction process, meaning the material jointing and time in addition to the development of the space and building volume, in the model.

Y-CHROMOSOME

1 Gender distribution of graduates 1945–2019

Up until the eighties, the traditional male-dominance of the Braunschweig architecture faculty was indisputable. Then, the share of male students, or rather graduates, started to drop continually from well over 90 percent. In 1980, the first time a chair was not filled by a man and Kristiana Hartmann became Professor of Architecture History and Urban History, around 82 percent of the students were still men. With Karin Wilhelm, Professor of History and Theory of Architecture and the City and Azade Köker, Professor of Architecture-Related Art, more women accepted the call to the TU Braunschweig architecture department from 2001 onwards. The male percentage of Diploma candidates shrank to about 50 percent in 2003 when a female examiner, Gabriele G. Kiefer, Professor of Landscape Architecture graded Diploma theses for the first time.

Since then, male students and graduates of architecture were mostly a minority statistically speaking. There were more possibilities to complete a final thesis in female-led departments thanks to Almut Grüntuch-Ernst in building design, Vanessa Miriam Carlow in city planning, Folke Köbberling in architecture-related art, Tatjana Schneider in architectural theory, and Elisabeth Endres in building services and energy design. In the seven and a half decades considered here, the percentage of men among graduates was around 66 percent. Up until 2015, of the professors

1

1945–1954

92 %
8 %

1965–1974

88 %
12 %

1985–1994

73 %
27 %

2005–2014

49 %
51 %

1955–1964

94 %
6 %

1975–1984

85 %
15 %

1995–2004

55 %
45 %

2015–2019

42 %
58 %

■ Male □ Female

evaluating Diploma assignments as first or co-examiners, 3 were women and 37 were men. The primary reason for the successive gender ratio shift was new appointments of professors. However, the possibility for all department chairs to supervise Master's theses also played a role.

ZEICHENSAAL

- 1 Zeichensaal 1979, debating how to bring a model to life
- 2 Zeichensaal 2014, still life after a busy day

We can assume that the majority of the 5003 Diploma theses completed at Braunschweig between 1945 and 2015 were largely developed in one of the several Zeichensäle (drawing studios autonomously administrated by students). As spaces for learning from and with one another, these “beating hearts of the architectural education” (Bart Lootsma) were and are a defining feature of the Braunschweig architecture training. Ideally, people with complementary skills and compatible work styles and hours would convene here. They met and developed an appreciation for one another, often forming lifelong friendships that in countless cases resulted in business partnerships. In many cases, you could call these communities ‘Zeichensaal families’. Zeichensaal reunions lasting well into old age and the atmosphere reminiscent of those drawing studios one would find in some ‘Braunschweig’ architectural practices attest to the power of these connections. Surviving the intense phase of the Diploma designs may play a significant role here.

Diploma candidates often found support from their Zeichensaal colleagues: from the party at the presentation booth for the →MELDEAUSSTELLUNG to help finishing assignments, model transport, etc. Were it not for the support in and from these creative spaces, not just coursework but also the Diploma period



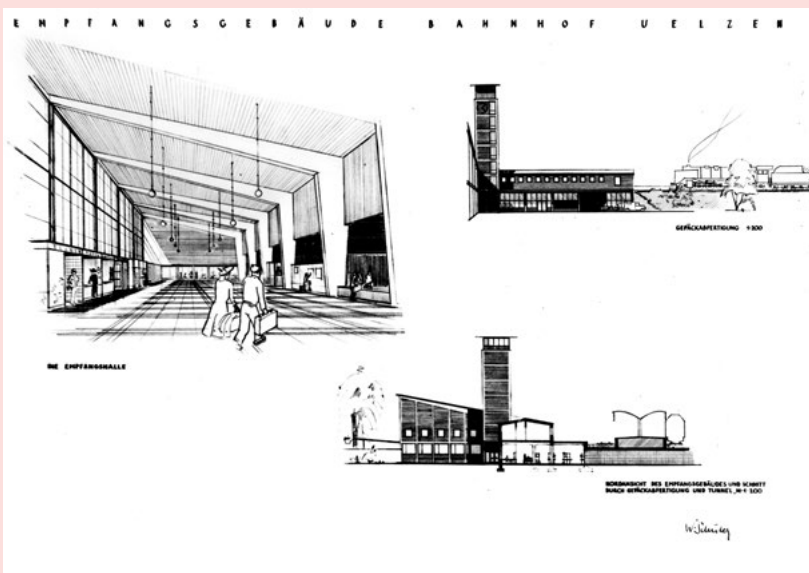
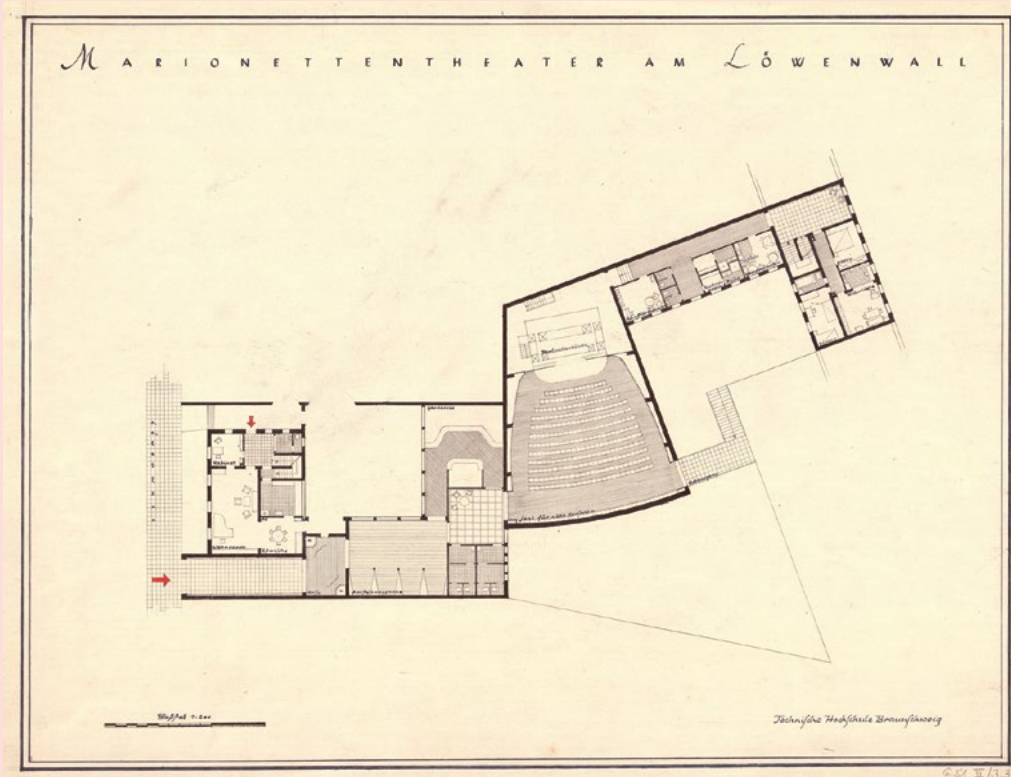
would have proven less successful. Diploma theses evolved during Zeichensaal discussions when Diploma candidates offered their concepts up for debate. Students looked over each other’s shoulders and taught one another how to use collage techniques, French curves, rendering software, and pigment powder [→LAB COAT]. Helping to execute other’s designs into submittable plans and models – which were becoming ever more complex over the decades [→X^N] – provided younger students with more refined skills and also honed their capability for teamwork. Many students prepared their own finals while assisting others with finishing theirs for several semesters in a row. The extensive lists of such helpers in Diploma readers dating back to the nineties and 2000s exemplify this practice of an “unwritten generational law that all the youngsters help their elders” (Jan Pingel, Diploma 2008). This concept of a student community, for which some students dedicated a few semesters of their own intense and long studies, appears to have been a part of the DNA of the Braunschweig Zeichensaal culture over the decades.

FURTHER READING

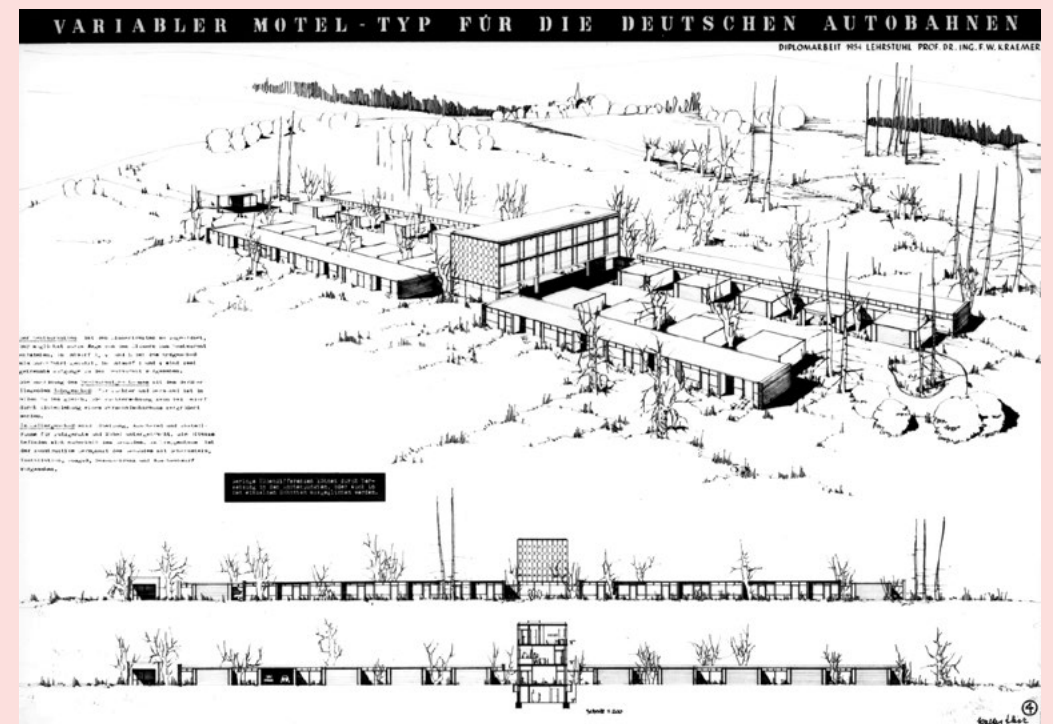
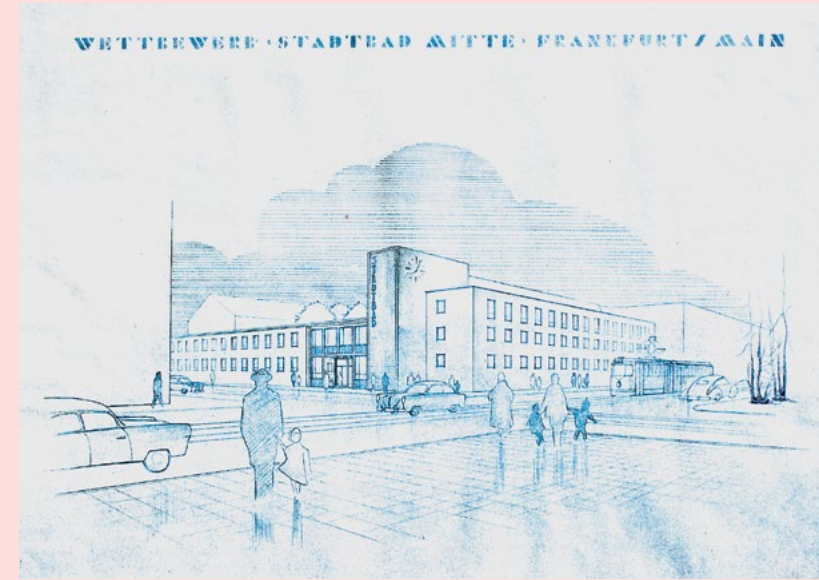
Lootsma, Bart: Soziale Kondensatoren (Social Capacitors), in: Haid, Elisabeth/ Prossliner, Judith (ed.): Architektur Zeichensaal 4. Diplomarbeiten aus einem Innsbrucker Zeichensaal (Architecture Zeichensaal 4. Diploma Theses from an Innsbruck Zeichensaal), 2007–2011, Vienna 2011, pgs. 36–49.

Verband Deutscher Studentenschaften (Association of German Student Bodies)/ Fachverband Architektur (Professional Architecture Association) (ed.): Studienplan für Architekten (Diplomingenieure). Vorschlag zu einer Reform des Architekturstudiums an den Technischen Hochschulen der Bundesrepublik und der Technischen Hochschule Berlin (Study plan for Architects (Graduate Engineers). Proposal for a Reform of the Architectural Studies at the Technical Universities of the Federal Republic and the Technische Hochschule Berlin), Braunschweig 1964.

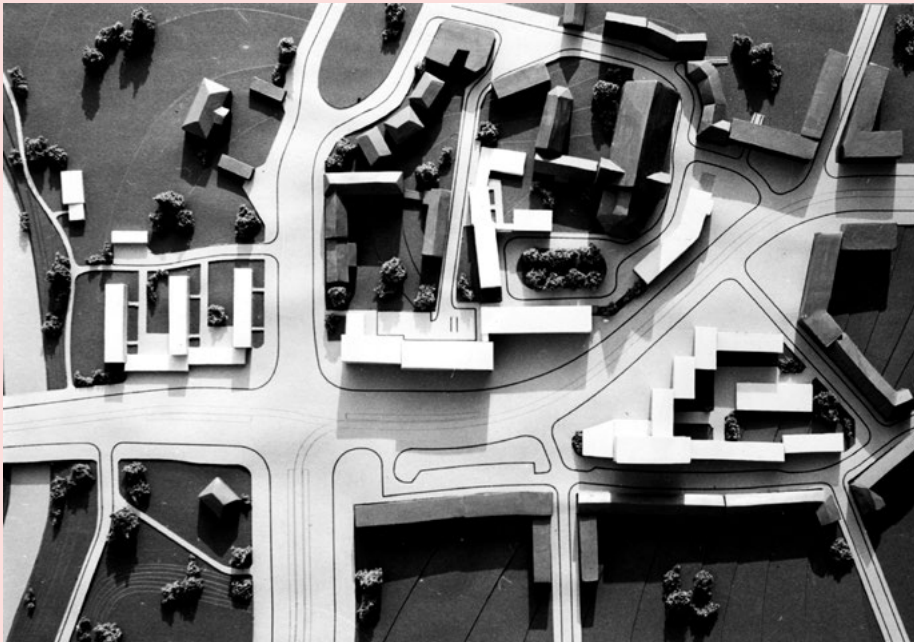
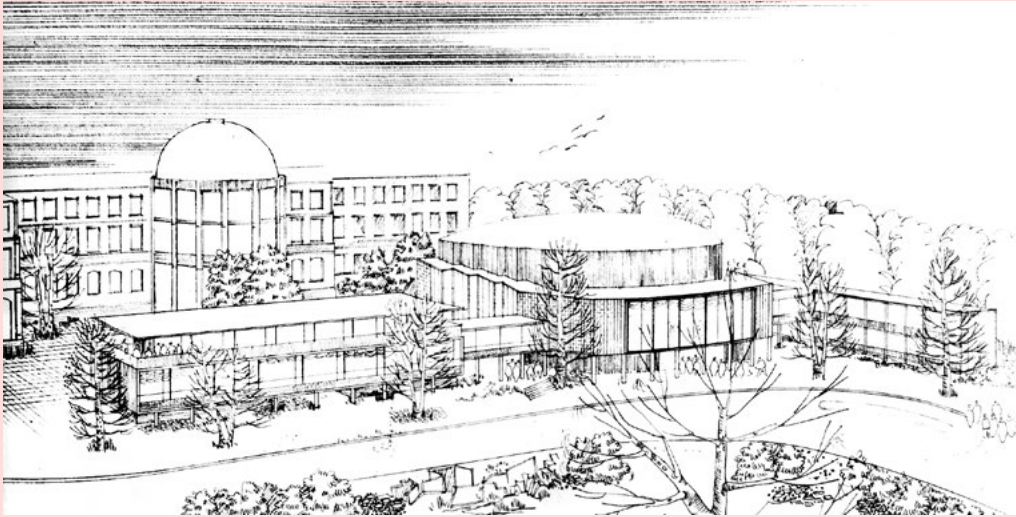
- ↑ Helga Herrenberger, Marionette Theater at Löwenwall, 1948, Kraemer
- ↓ Willi-Ernst Schöler, Uelzen Train Station, 1949, Kraemer



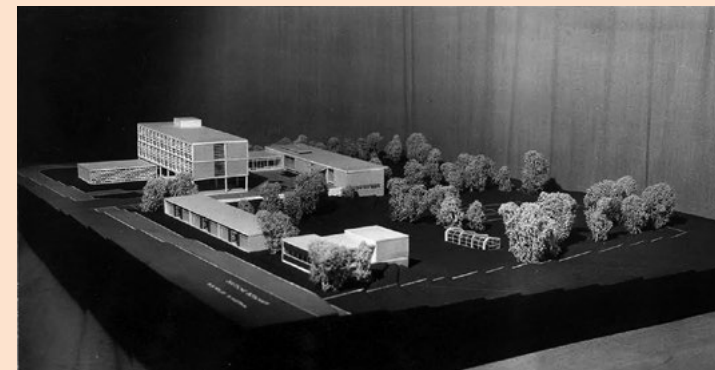
- ↑ Bruno Jalaß, Stadtbath (municipal bath) Mitte in Frankfurt am Main, 1953, Kraemer
- ↓ Walter Fleck, Variable Motel-Type for the German Motorway, 1954, Kraemer



- ↑ Frank Sommerfeld, Concert and Congress Building, 1954, Kraemer
- ↓ Horst Goebel, Development Plan near the City Traffic Intersection Augusttor in Braunschweig, 1955, Göderitz



- ↑ Horst Laskowski, Design for a Credit Bank, 1955, Kraemer



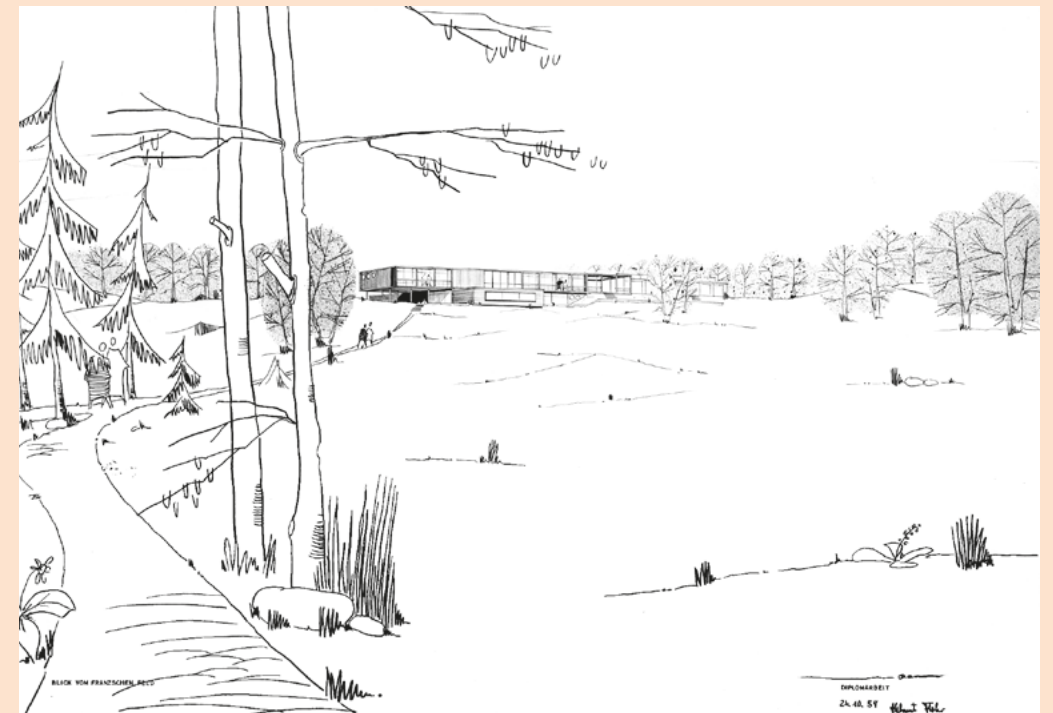
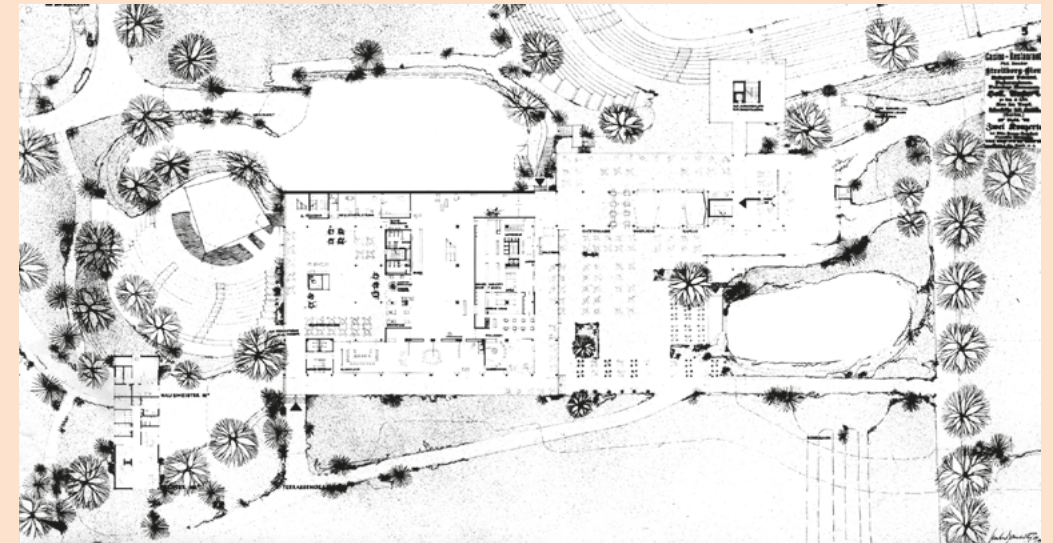
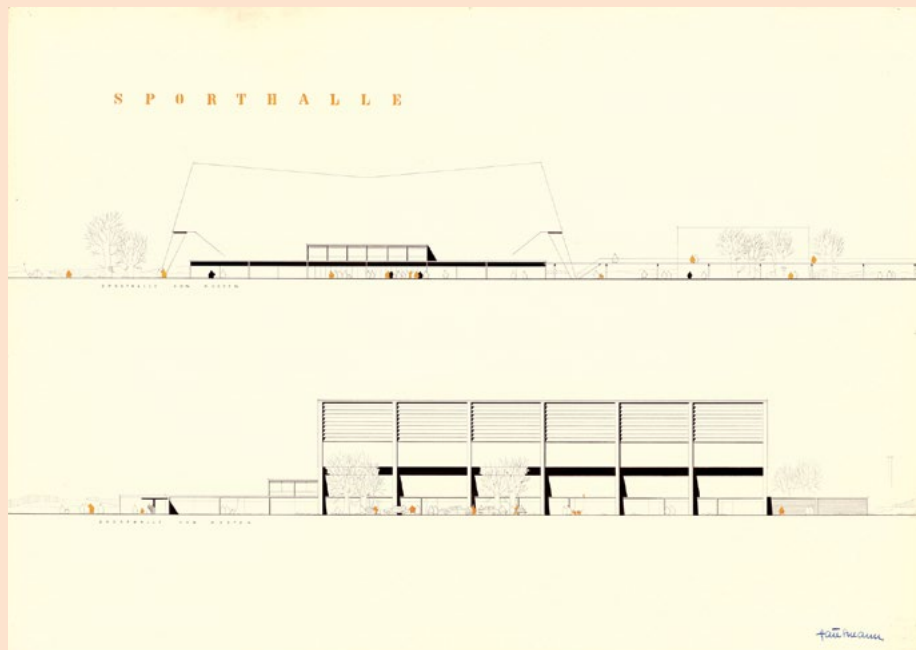
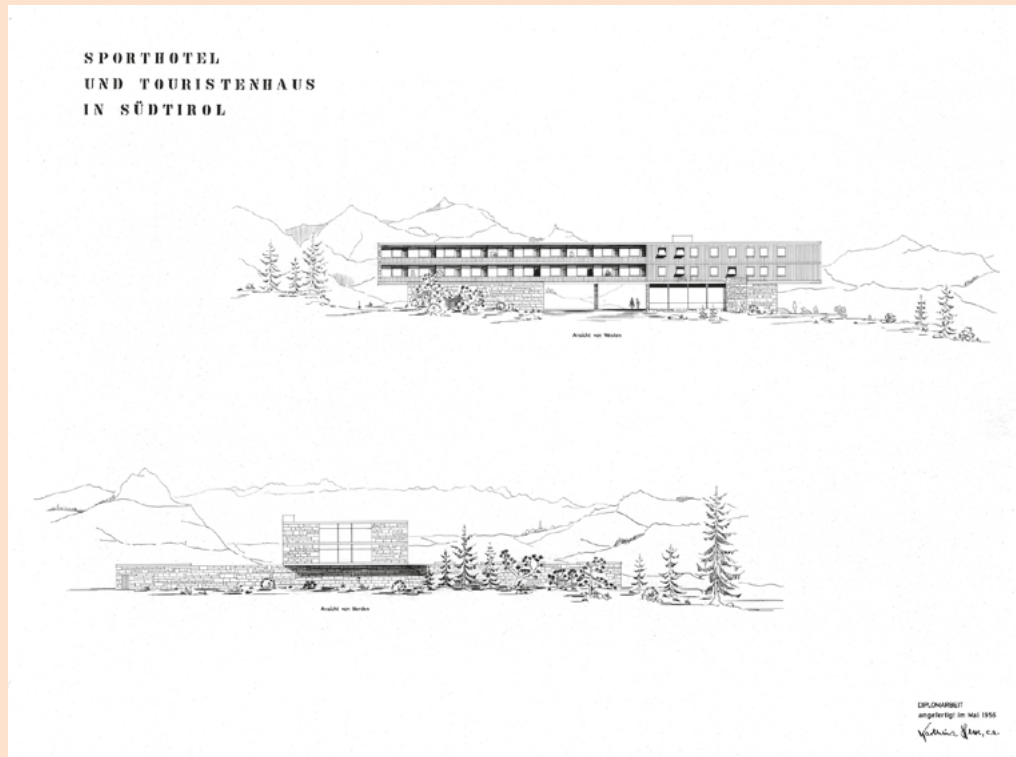
- ↓ Hans-Joachim Pysall, Design for a Savings Bank, 1955, Kraemer
- ↓ Wolfgang Westphal, German Embassy in the Tropics, 1955, Kraemer

↑ Karl-Heinz Hesse, Sports Hotel
with Tourist Center in South Tyrol,
1956, Oesterlen

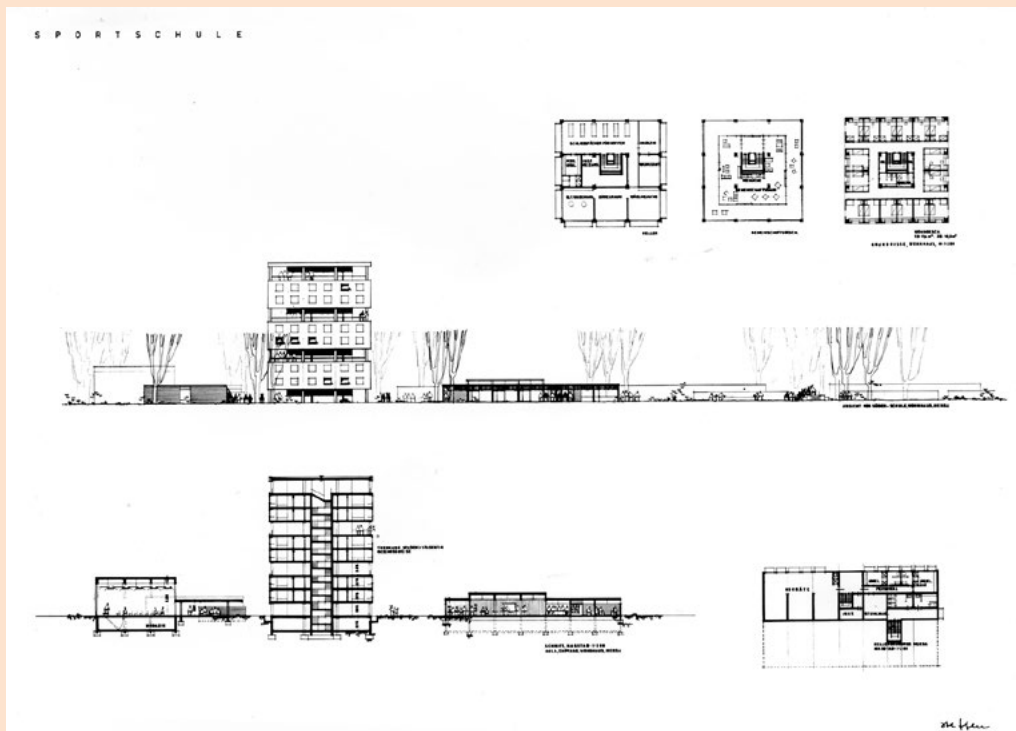
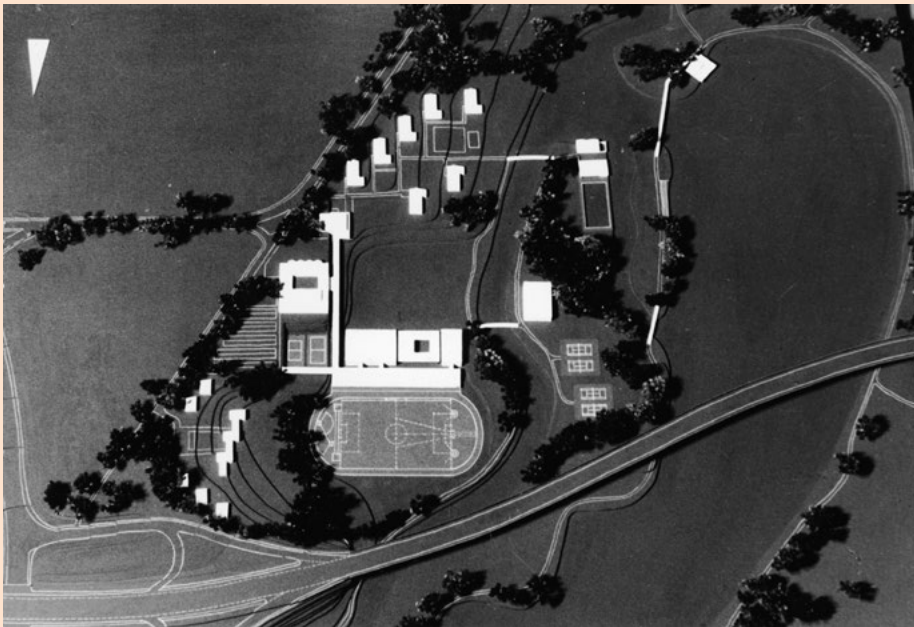
↓ Ulrich Hausmann, Sports Hall,
1958, Kraemer

↑ Horst von Bassewitz, Nußberg
Casino, 1959, Oesterlen

↓ Helmut Flohr, Nußberg Casino,
1959, Oesterlen

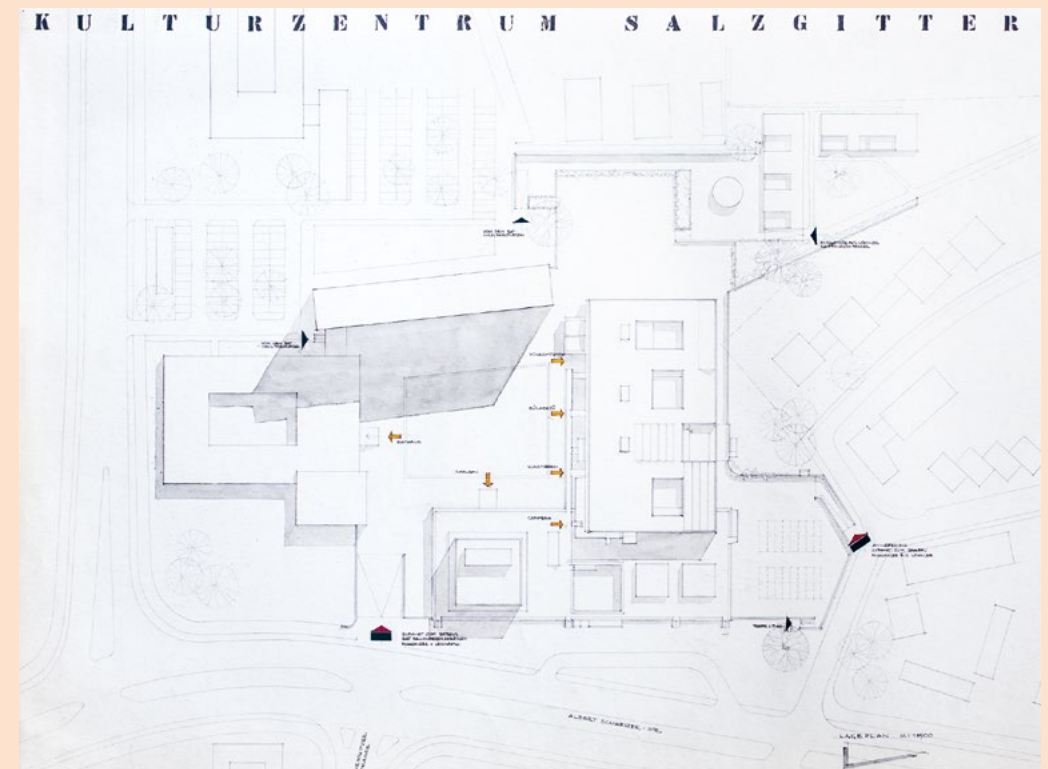
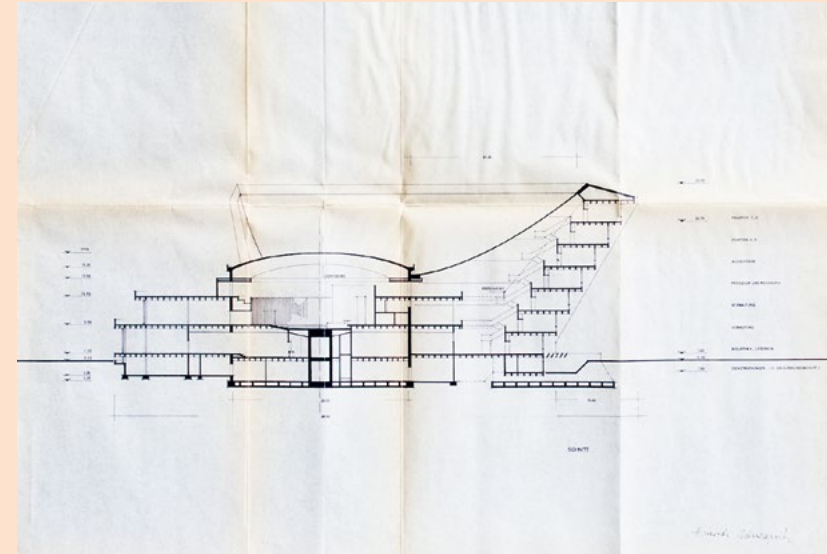


- ↑ Klaus Renner, State Sports School, 1960, Oesterlen
- ↓ Jürgen Steffen, State Sports School, 1960, Oesterlen



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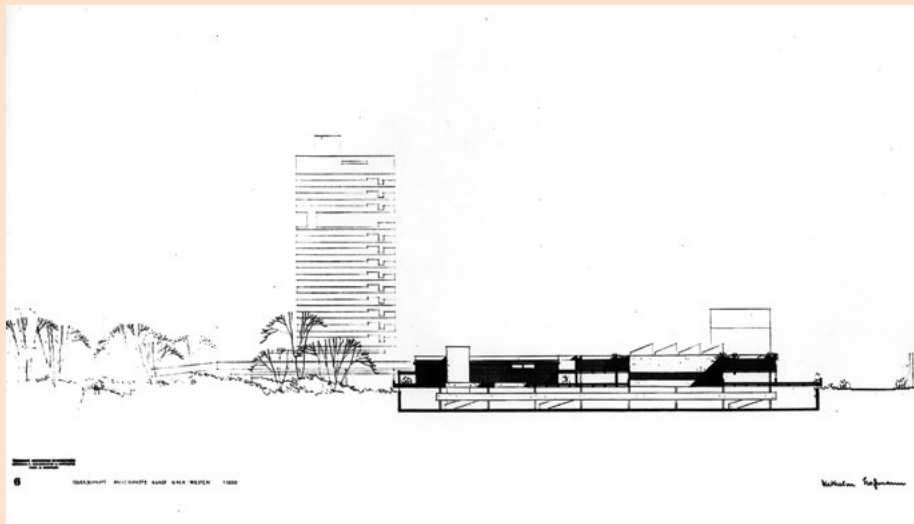
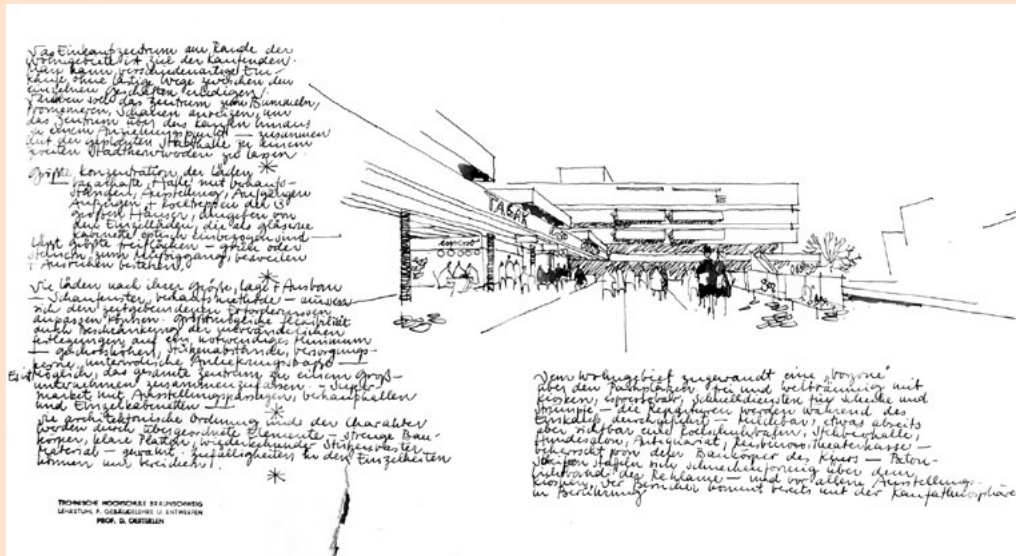
- ↑ Hinrich Schwanitz, Design for a State Parliament Building, 1961, Oesterlen
- ↓ Hinrich Storch, Cultural Center Salzgitter Lebenstedt, 1961, Oesterlen



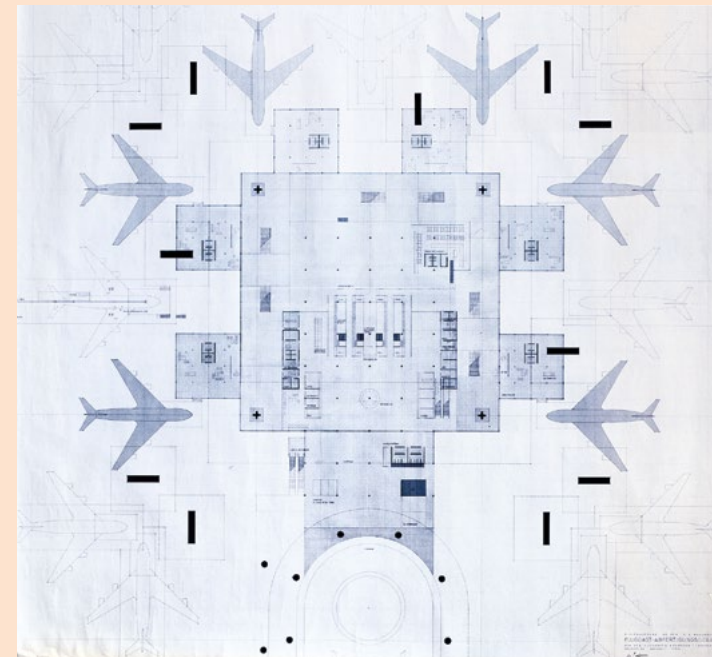
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1960, 1961

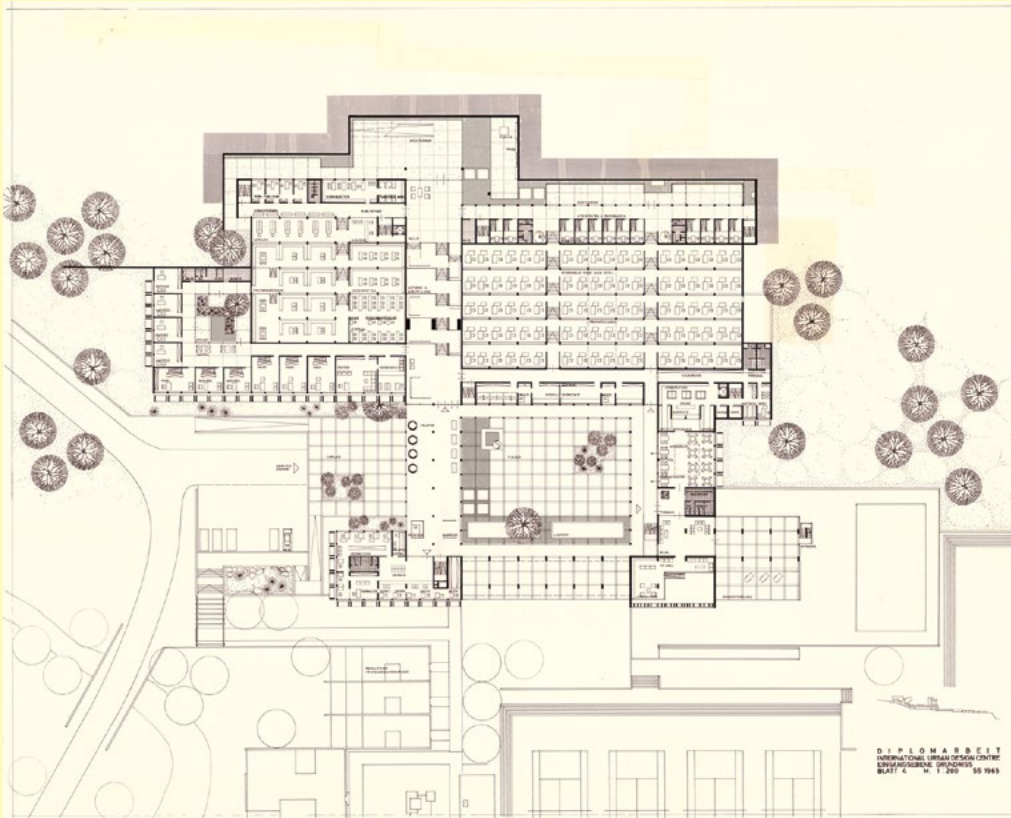
- ↑ Walter Ehlers, Entwurf für ein Einkaufszentrum (design for a shopping center), 1962, Oesterlen
- ↓ Diethelm Hoffmann, Braunschweig University of Art, 1963, Oesterlen



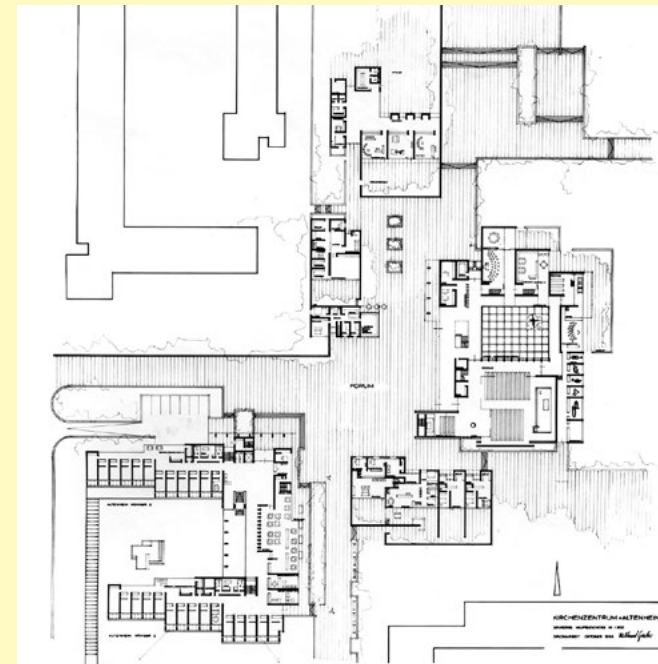
- ↑ Meinhard von Gerkan, Fluggast-Abfertigungsgebäude (passenger terminal building) in Hannover-Langenhagen, 1964, Oesterlen
- ↓ Hans-Joachim Witt, Fluggast-Abfertigungsgebäude (passenger terminal building) in Hannover-Langenhagen, 1964, Kraemer



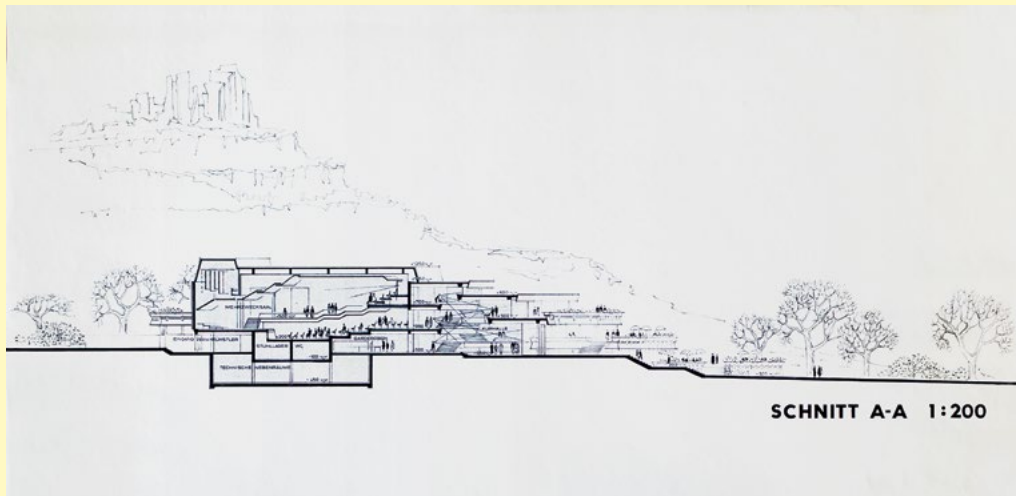
- ↑ Dietrich Fischer, International Urban Design Centre, 1965, Oesterlen
- ↓ Uwe Holler, Administration Building with Occupational Medical Service and Cafeteria, 1965, Henn



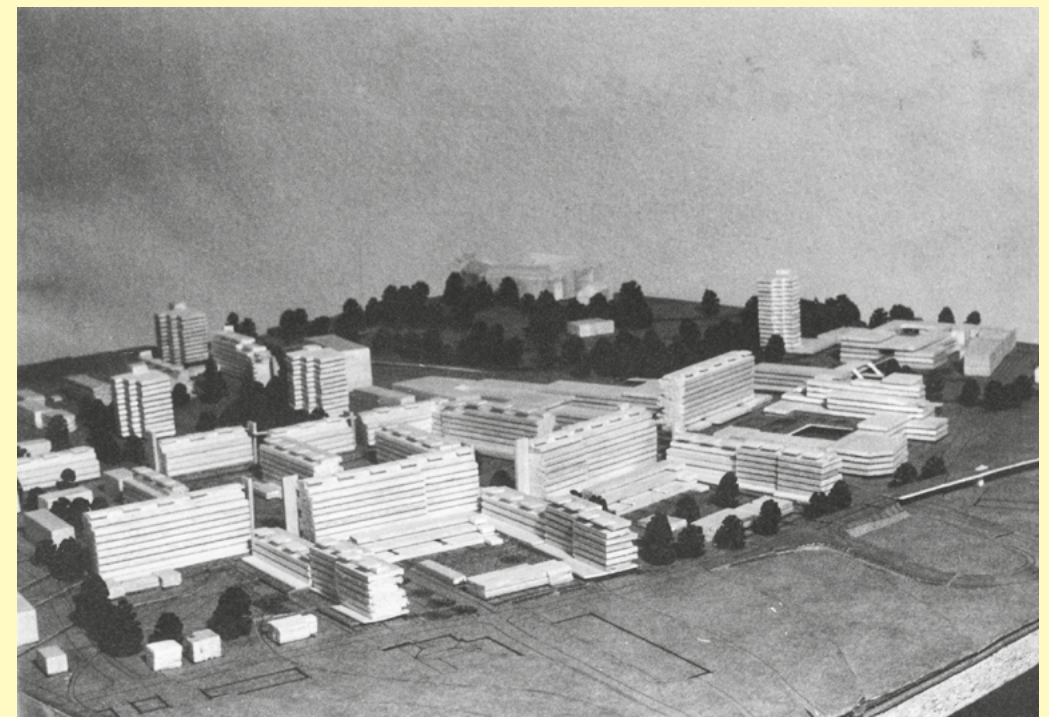
- ↑ Ernst-Detlef Kohl, Münster Gievenbeck Housing Development, 1965, Jensen
- ↓ Eckhard Gerber, Kirchliches Gemeindezentrum und Altenheim (church community center and retirement home), 1966, Kraemer



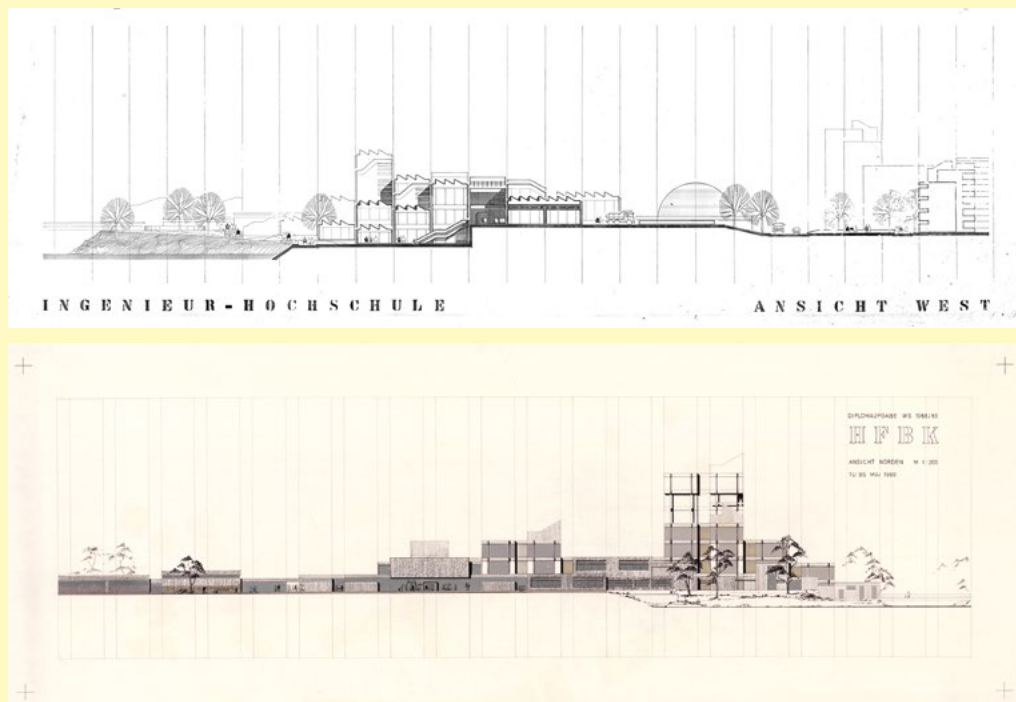
- ↑ Lutz Käferhaus, Kurhaus eines Badeorts (spa house at a bathing resort), 1967, Kraemer
- ↓ Maren Lauer (now Käferhaus), Treffpunkt im Schloßpark (meeting point at Schloßpark), 1967, Oesterlen



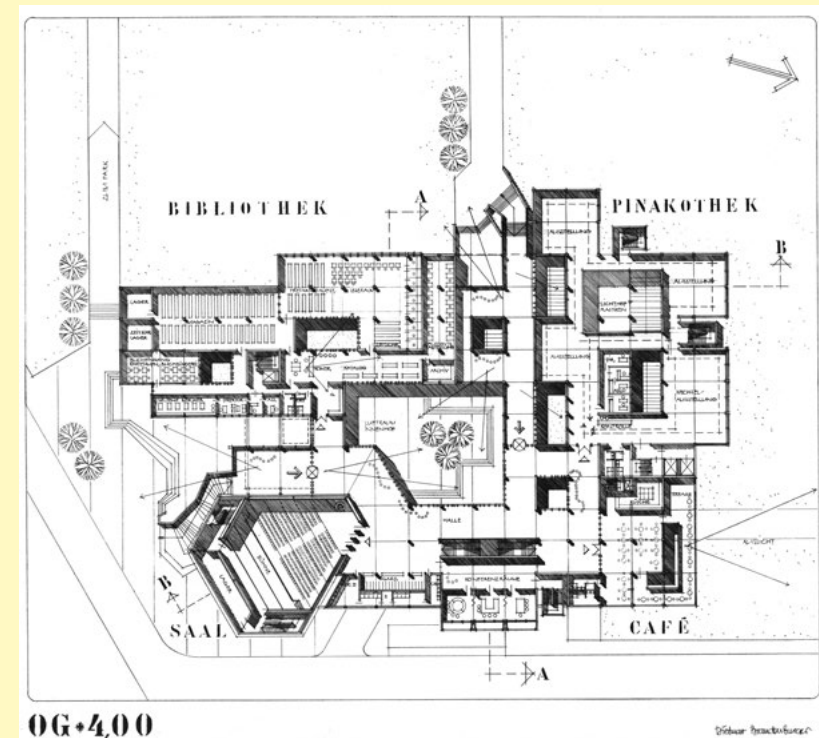
- ↑ Helge Bofinger, Tagesheimgymnasium (daycare school facility), 1968, Kraemer
- ↓ Carsten Zillich, Wolfenbüttel. Ausbau eines regionalen Mittelzentrums (extension of a mid-sized town), 1968, Strizic



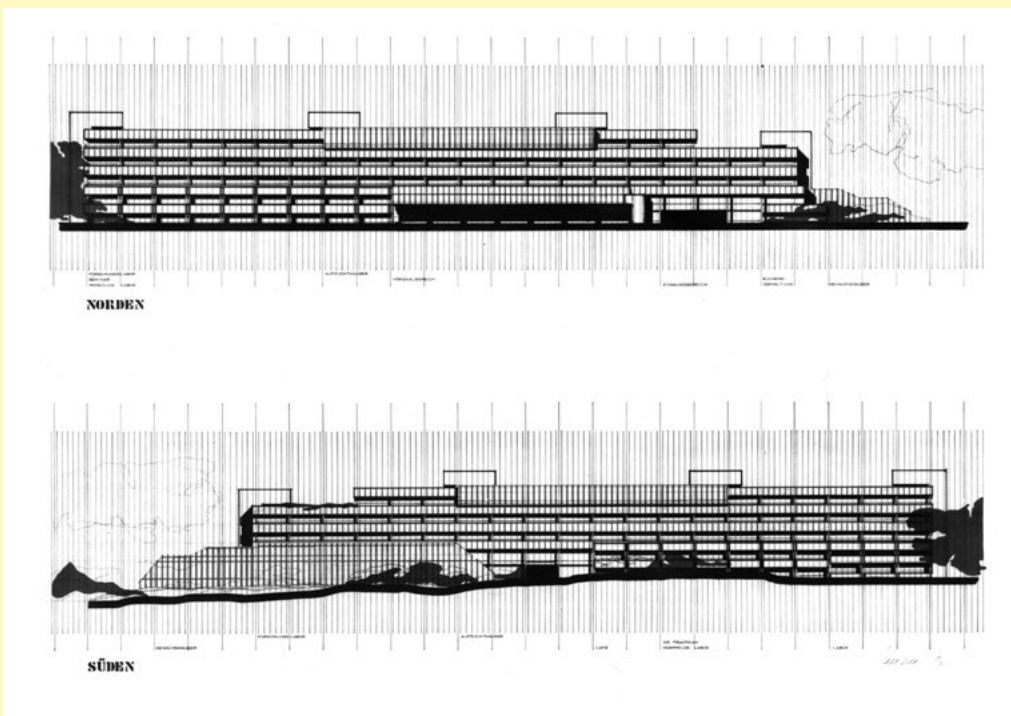
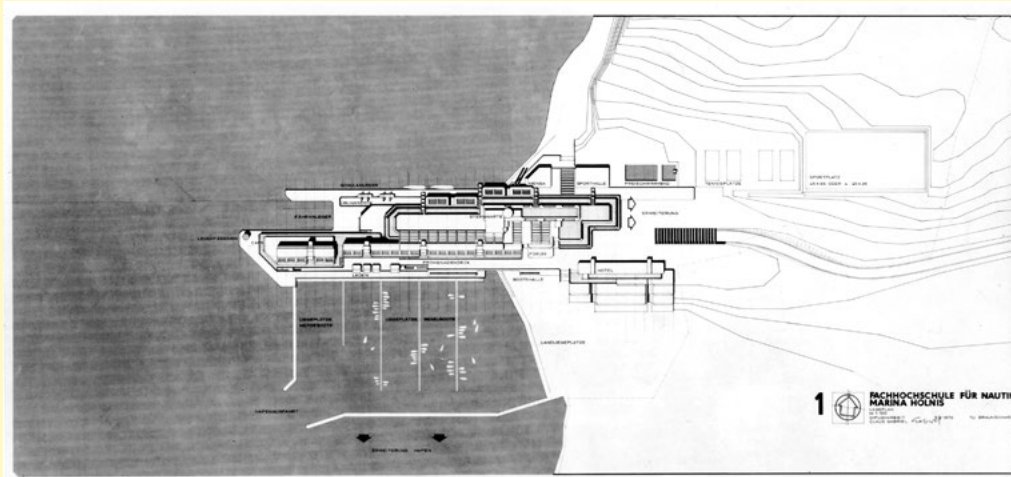
- ↑ Uwe Schüler, Engineering School, 1969, Strizic
- ↓ Wilhelm Stute, Braunschweig University of Art, 1969, Kraemer



- ↑ Friedrich Pramann, Kulturzentrum für eine Stadt im Mittelmeerraum (cultural center for a city in the Mediterranean), 1970, Kraemer
- ↓ Dietmar Brandenburger, Kulturzentrum für eine Stadt im Mittelmeerraum (cultural center for a city in the Mediterranean), 1970, Oesterlen



- ↑ Claus Gabriel, Technical College for Nautical Sciences Marina Holnis, 1970, Kraemer
- ↓ Thomas Jansen, Institute for Biology of the TU Braunschweig, 1970, Strizic



- ↑ Ute Lübbe (now Schulte-Lübbe), Modell für ein Freizeitzentrum im Harz (model for a leisure center in the Harz), 1970, Jelpke
- ↓ Harmen Thies, Community Facilities of a Wintersport Location in the High Alps, 1970, Oesterlen

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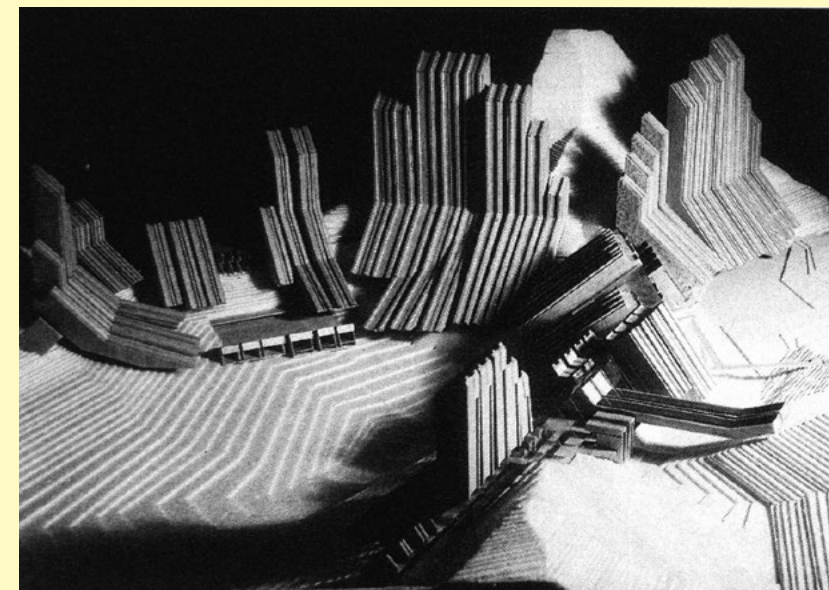
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"Mit falsch gebauten Städten kann man eine Gesellschaft und eine Demokratie genauso ruinieren wie durch die Errichtung eines totalitären Regimes."

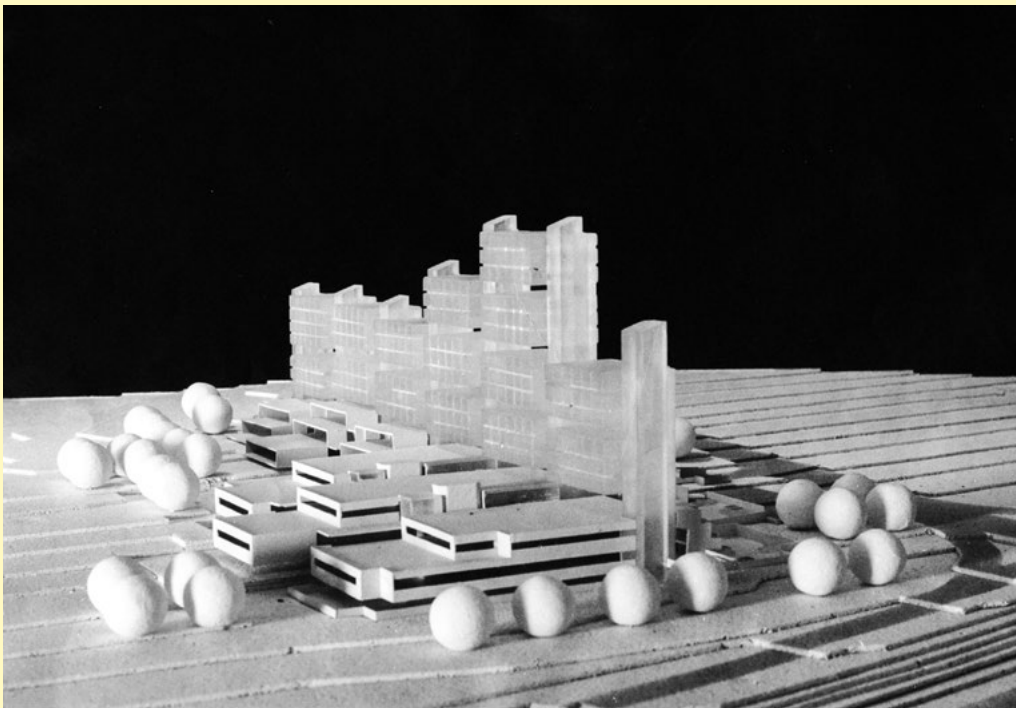
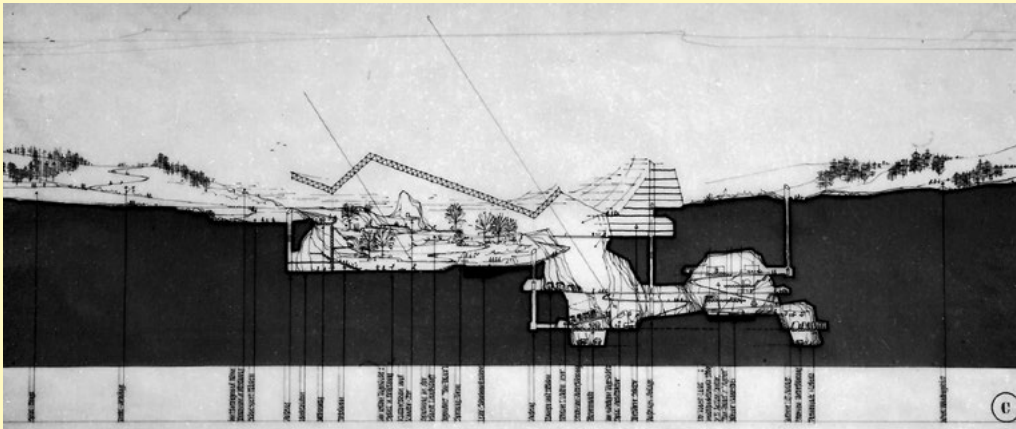
H.P. Bahrdt, zitiert in: Tatsachen und Argumente, Nr. 284
Bonn, 1970
"Information zum Städtebauförderungsgesetz."

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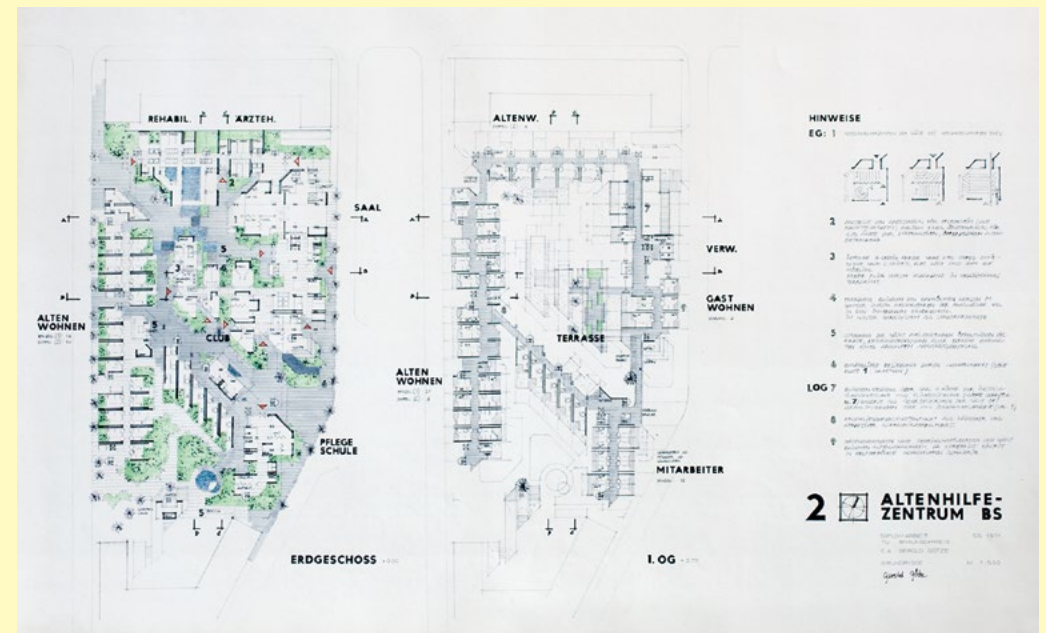
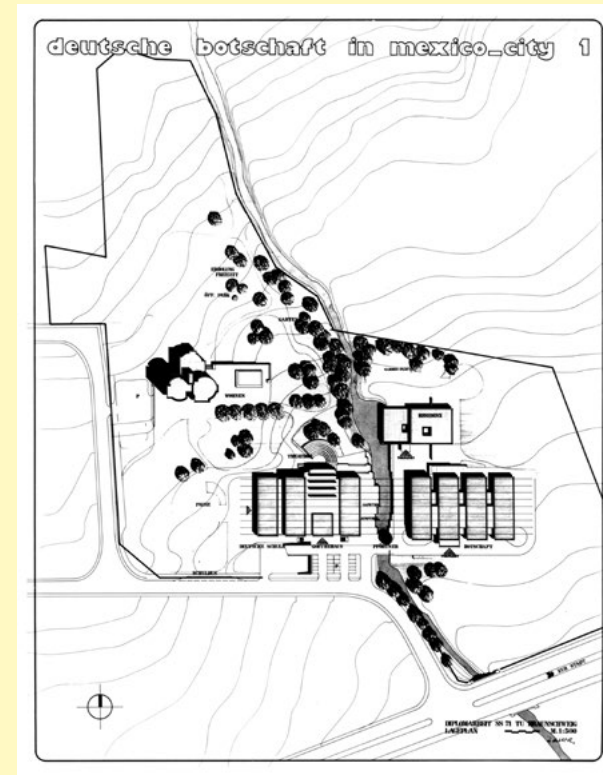
Ursprünglich ist das Freizeitproblem ein Arbeiterproblem gewesen, das sich entwickelt hatte aus der Ausbeutung der Arbeitskraft, aus der manifesten Unmenschlichkeit der Arbeit, in der überlange Arbeitszeit nur ein Element unter mehreren war, - die Schwere der Arbeit, die radikale Unfreiheit und Abhängigkeit sowohl der Lohnarbeit selbst als insbesondere der politischen Existenz überhaupt. Indem sich die sozialen Bedingungen der Industriearbeit geändert haben, veränderte sich inhaltlich das Freizeitproblem und wurde Problem einer ganzen Gesellschaft.



- ↑ Rüdeger Vermehren, Model for a Leisure Center, 1970, Jelpke
- ↓ Christian Wiethüchter, Computer Training Center, 1971, Kraemer

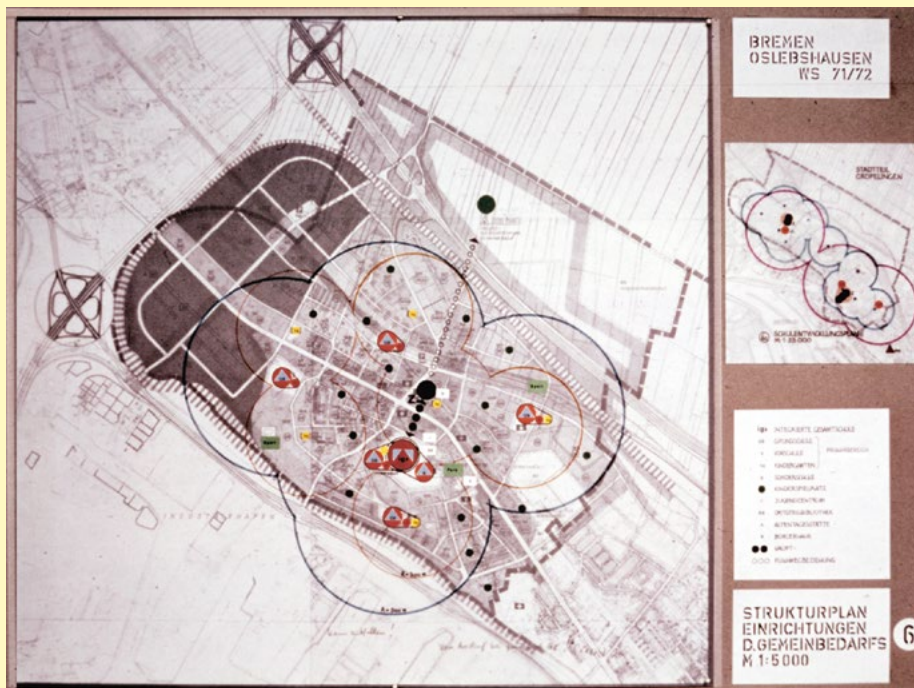


- ↑ Ünal Agartir, German Embassy in Mexico City, 1971, Oesterlen
- ↓ Gerold Götze, Center of Care for Senior Citizens Braunschweig, 1971, Ostertag



↑ Wolfgang Wiechers, Einrichtungen der Altenhilfe in Braunschweig. Ein Beitrag zum Wohnen alter Menschen in der Stadt (Senior assistance facilities in Braunschweig. A contribution to the housing of elderly people in the city), 1971, Kraemer

↓ Cord Heinrich Bahlburg, Bremen-Oslebshausen. Proposal for the extension of an urban development axis, 1972, Bruckmann

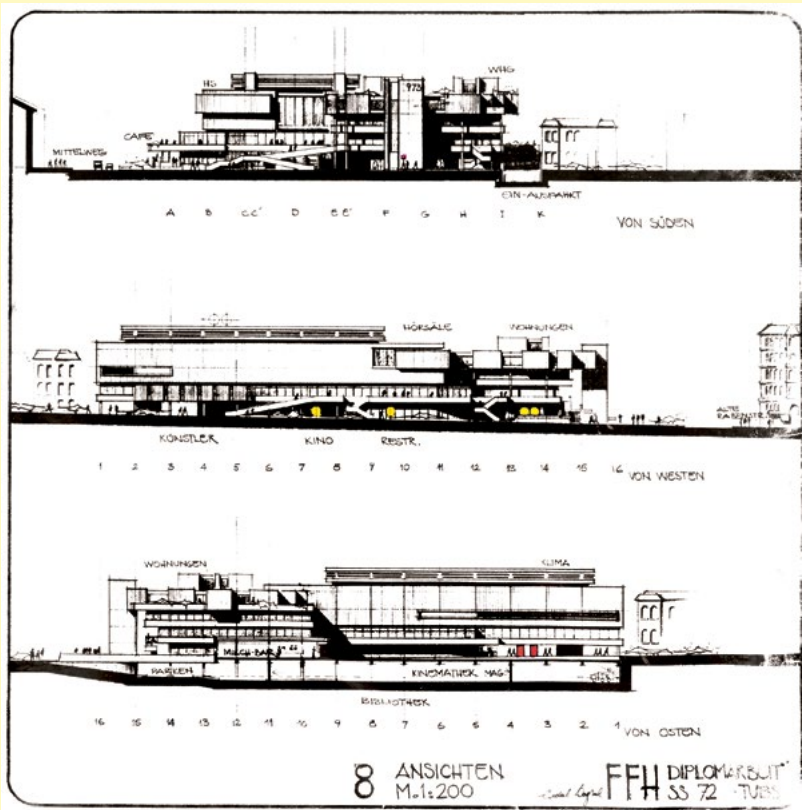
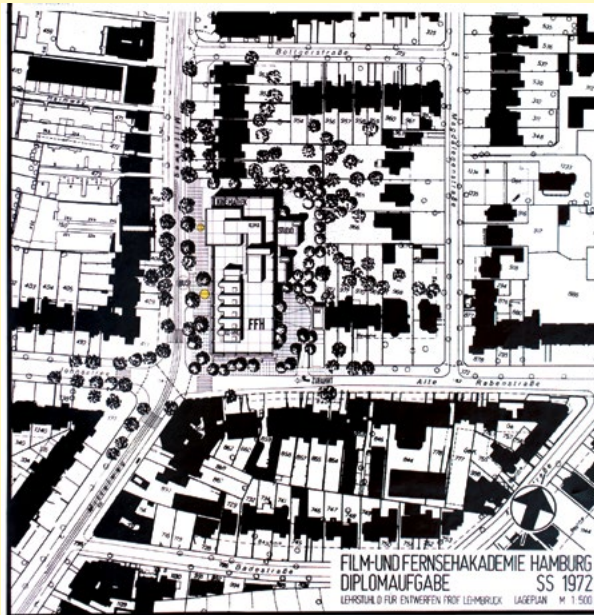


↑ Hermann Gaffga, Bremen-Oslebshausen. Proposal for the extension of an urban development axis, 1972, Bruckmann

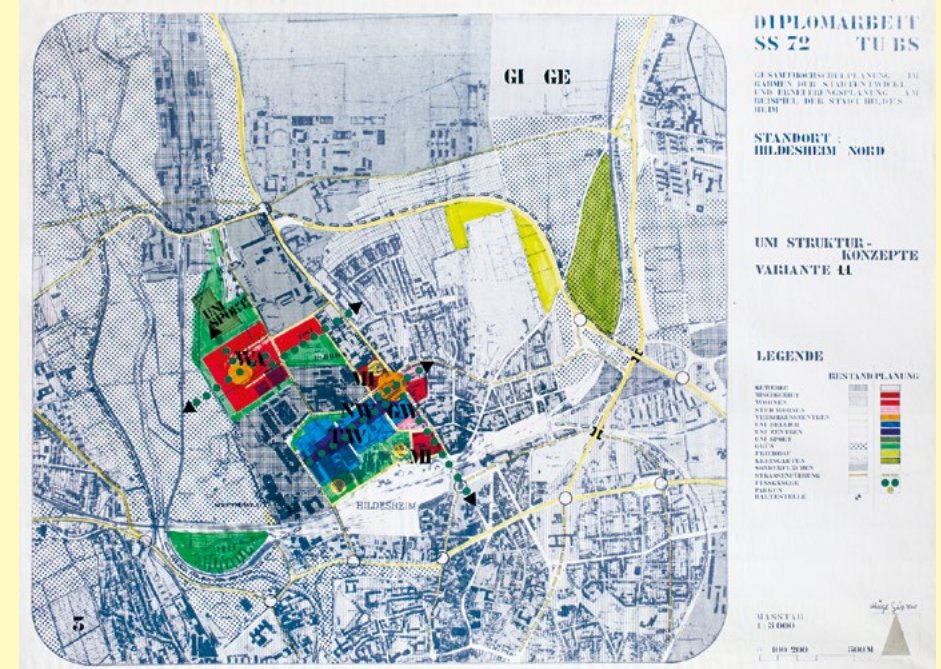
↓ Peter Brandenburg, Sports and Recreation Park Saalermühle, 1972, Kraemer



- ↑ Wolf Geipel, Film and Television Academy Hamburg, 1972, Lehmbruck
- ↓ Erdal Dogrul, Film and Television Academy Hamburg, 1972, Lehmbruck

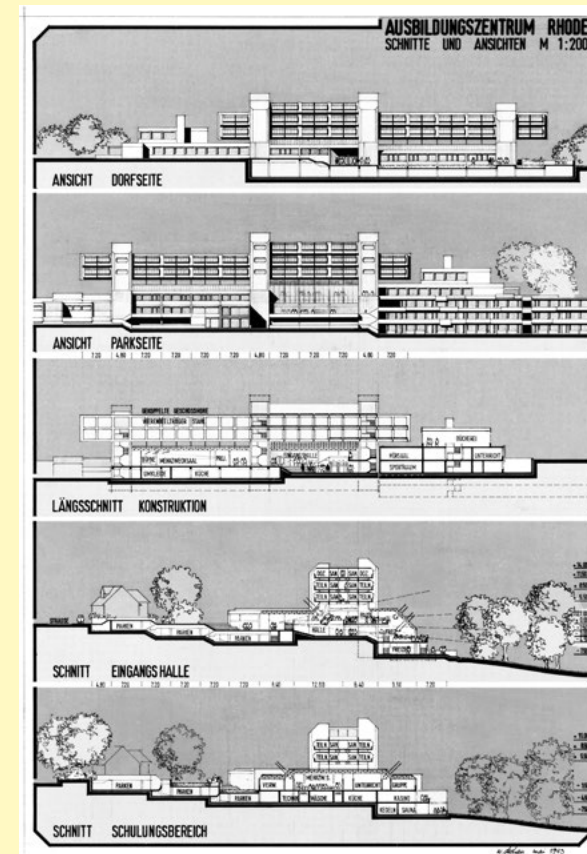
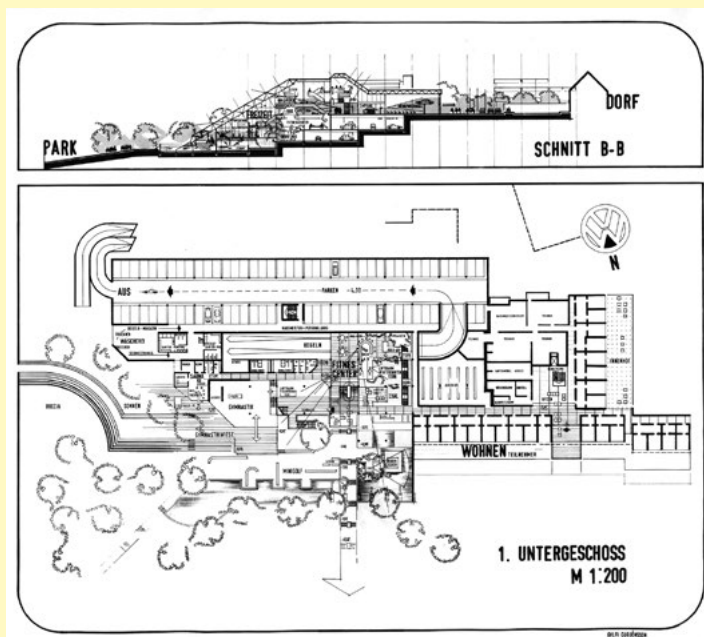
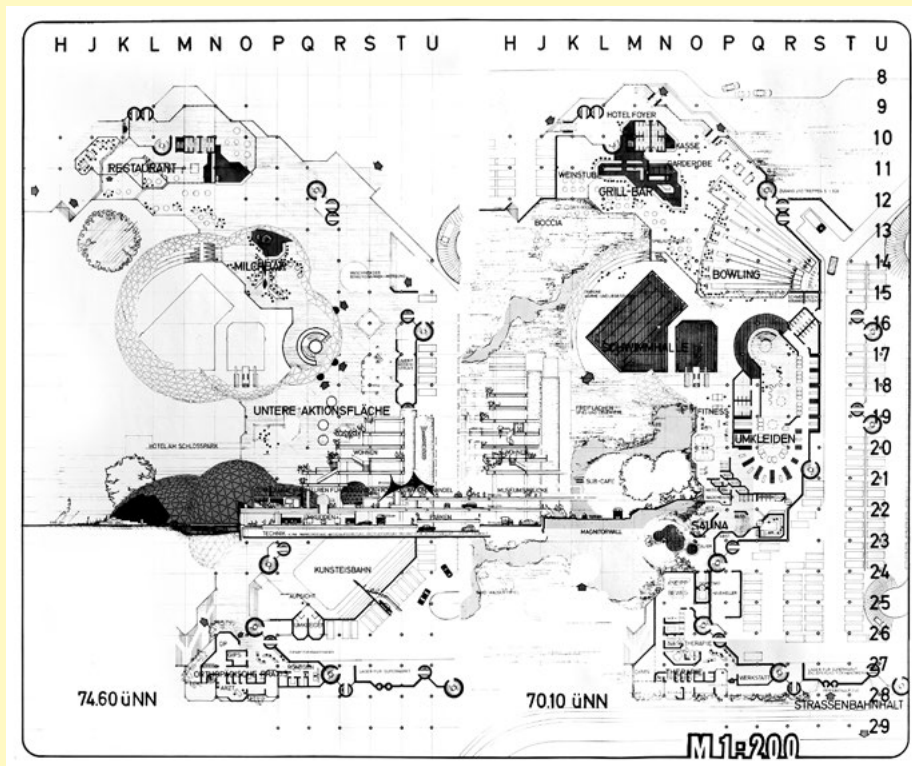


- ↑ Müge Güçsav (now Alkan), Polytechnic University as Part of the Urban Development and Renewal Planning Based on the Example of the City of Hildesheim, 1972, Bruckmann

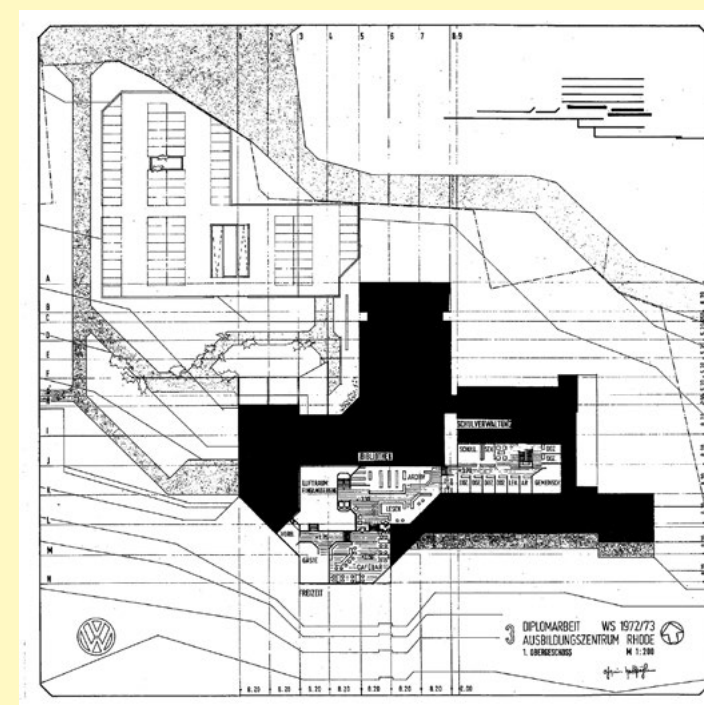


- ↓ Wibke Thon-Dreessen (now Ihlenburg-Dreessen), Polytechnic University as Part of the Urban Development and Renewal Planning Based on the Example of the City of Hildesheim, 1972, Bruckmann

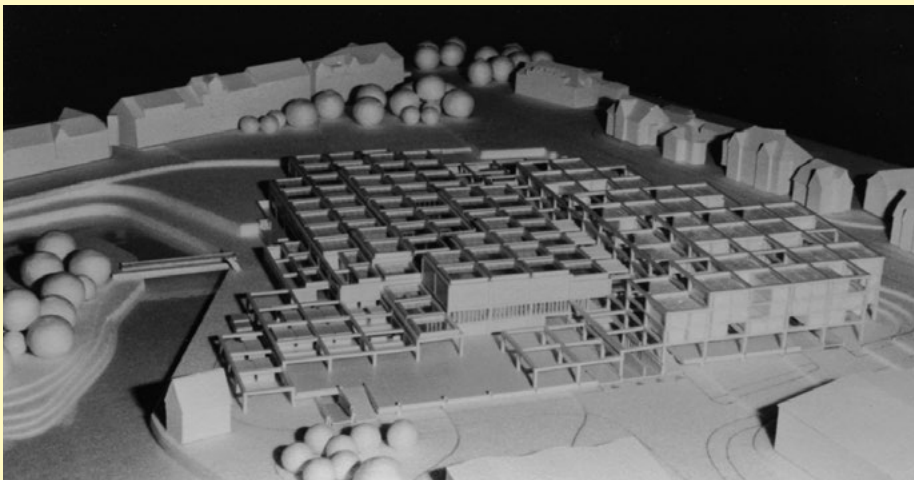
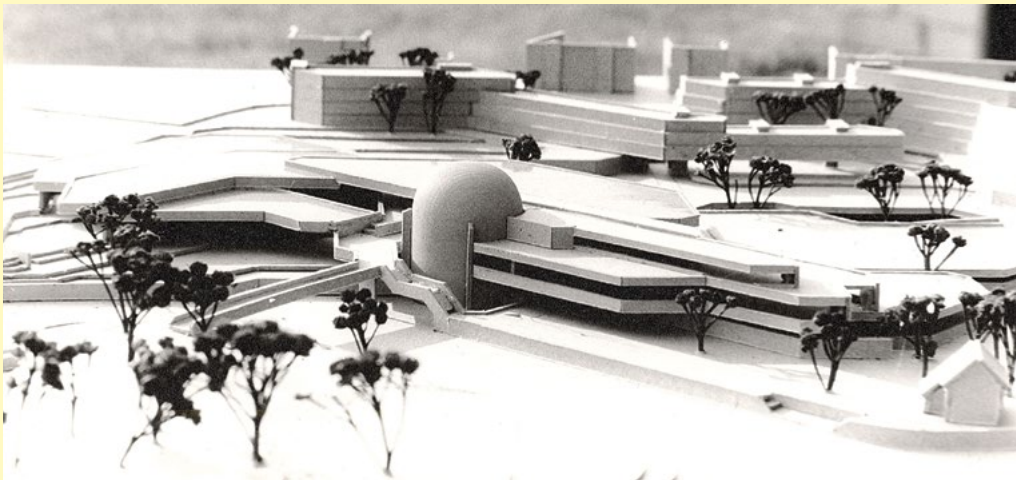
- ↑ Hartmut Jentsch, Schloßpark Braunschweig, 1972, Ostertag
- ↓ Gylfi Guðjónsson, Training Center Rhode, 1973, Kraemer



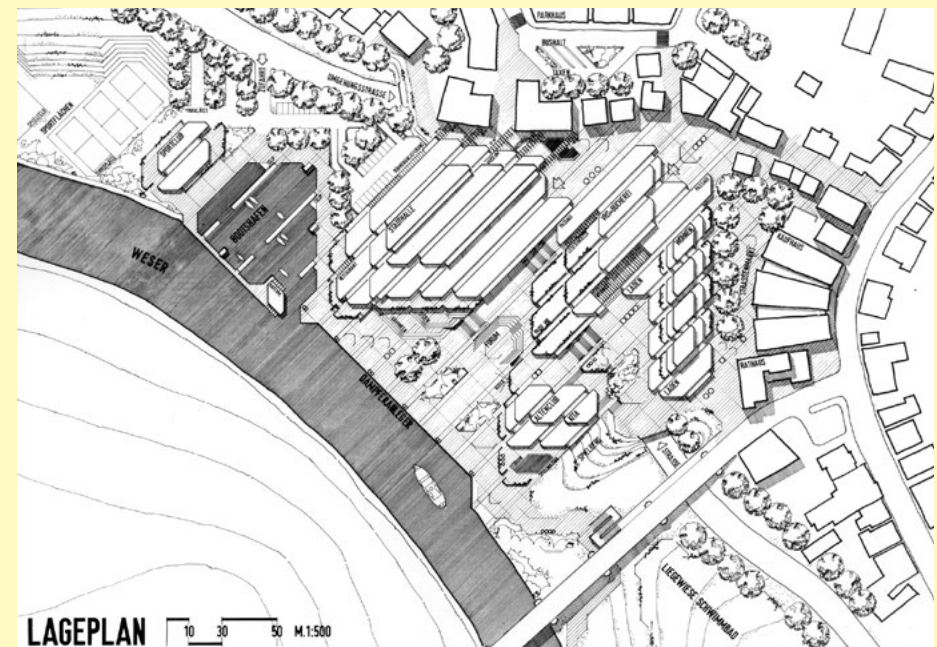
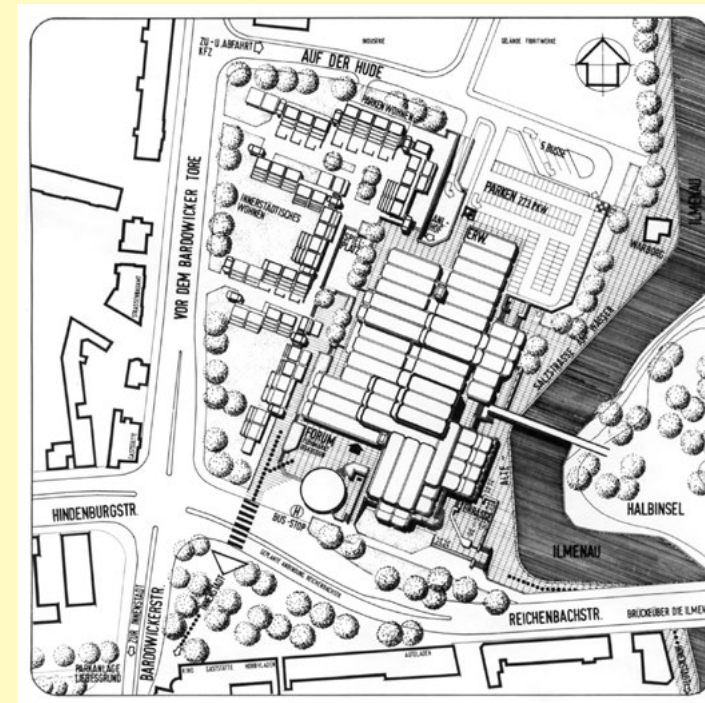
- ↑ Wilfried Dechau, Training Center Rhode, 1973, Kraemer
- ↓ Afşin Hatipoğlu, Training Center Rhode, 1973, Kraemer



- ↑ Bernhard Hirche, Museum of Natural History in Lüneburg, 1973, Oesterlen
- ↓ Jürgen Zirfaß, Museum of Natural History in Lüneburg, 1973, Oesterlen

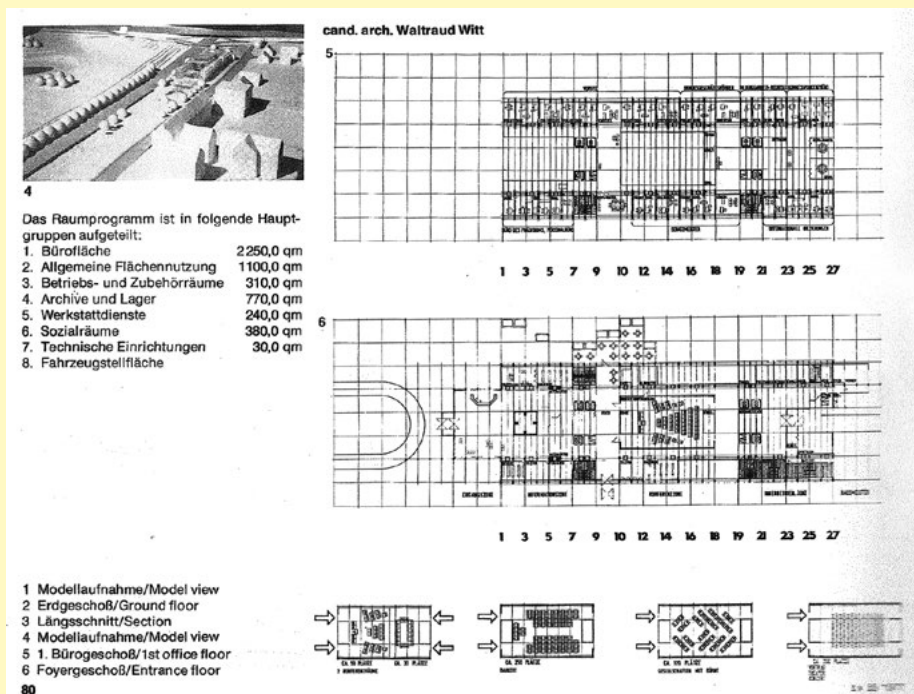
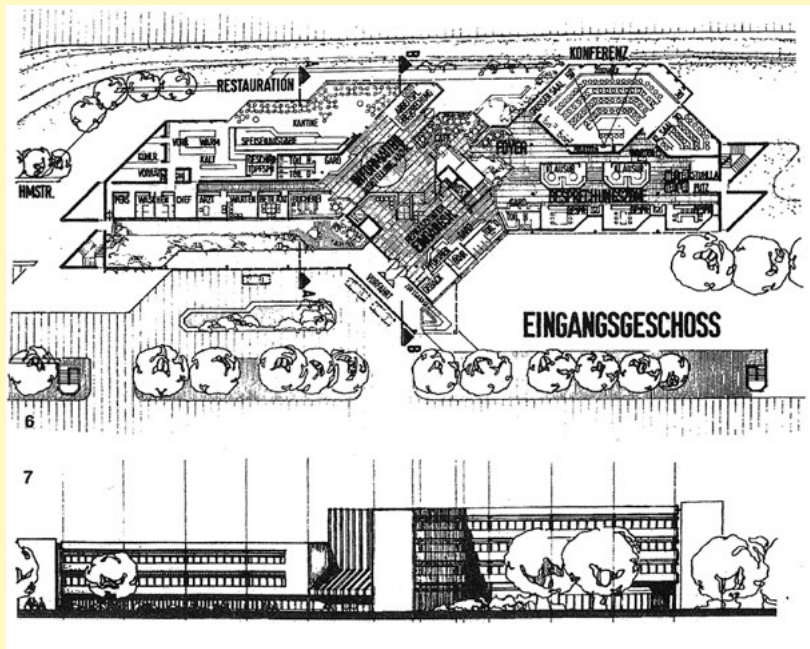


- ↑ Heide Schwickert (now Becker), Museum of Natural History in Lüneburg, 1973, Oesterlen
- ↓ Renate Müller (now Müller-Steinweg), Stadthalle (civic center) Vlotho, 1974, Oesterlen



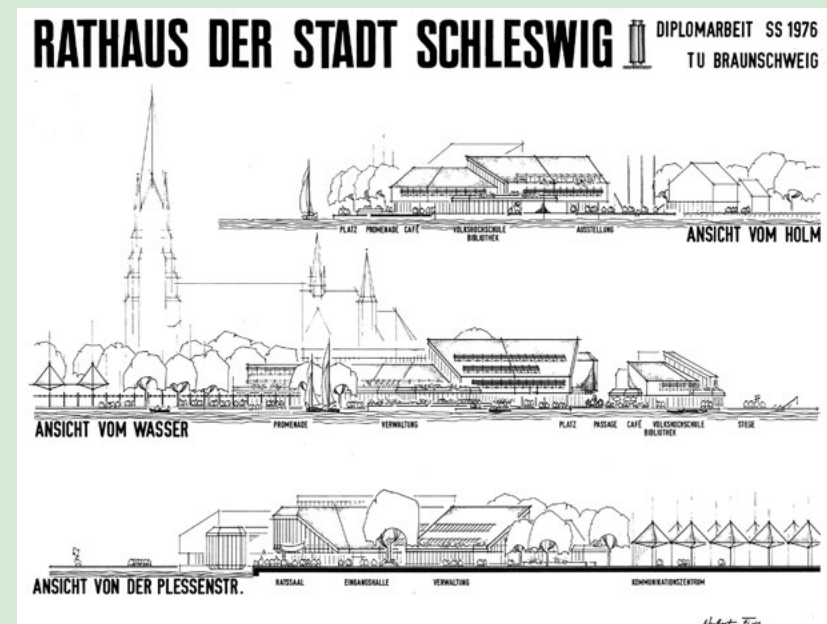
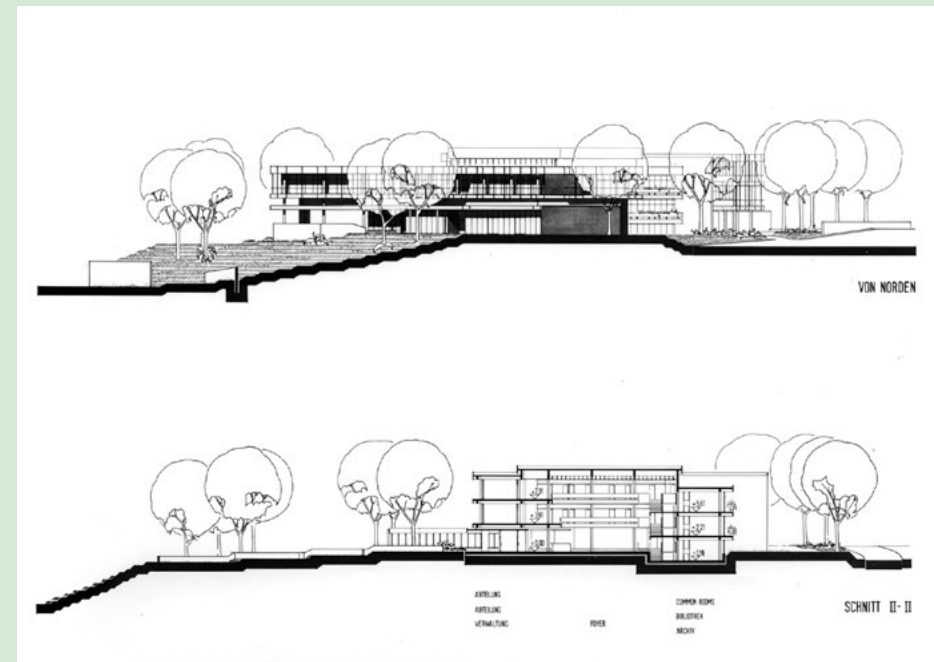
↑ Bernhard Meves, Administrative Building for the Federal Headquarters of a Political Party, 1974, Kraemer

↓ Waltraud Witt, Administrative Building for the Federal Headquarters of a Political Party, 1974, Kraemer



↑ Udo Gebauhr, Administration and Research Center of the Studienstiftung des Deutschen Volkes (German National Academic Foundation), 1976, Lehmbruck

↓ Norbert Figge, Town Hall of the City of Schleswig with Recreational Facilities on the River Schlei, 1976, Ostertag

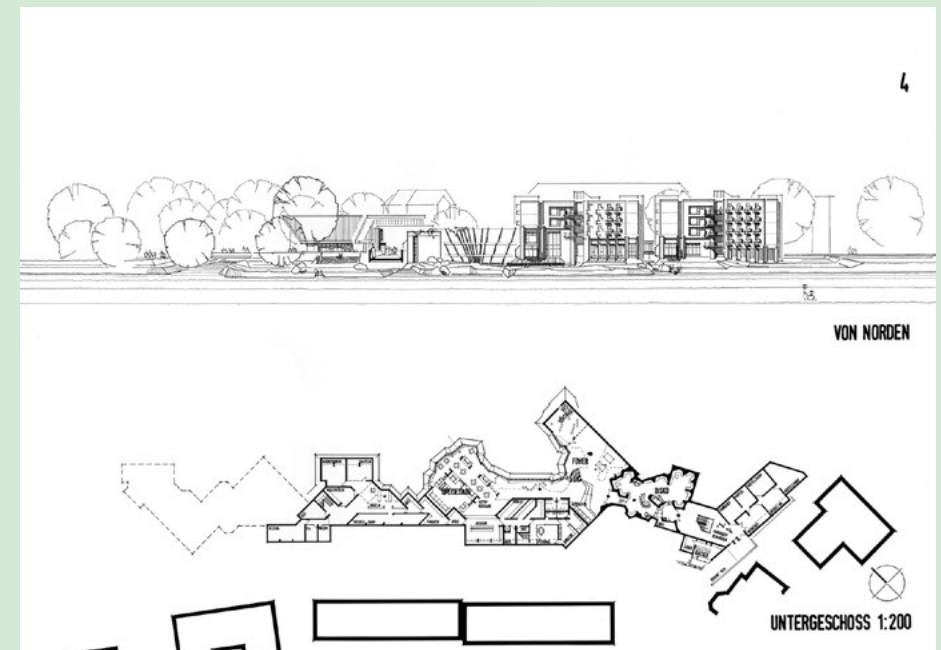
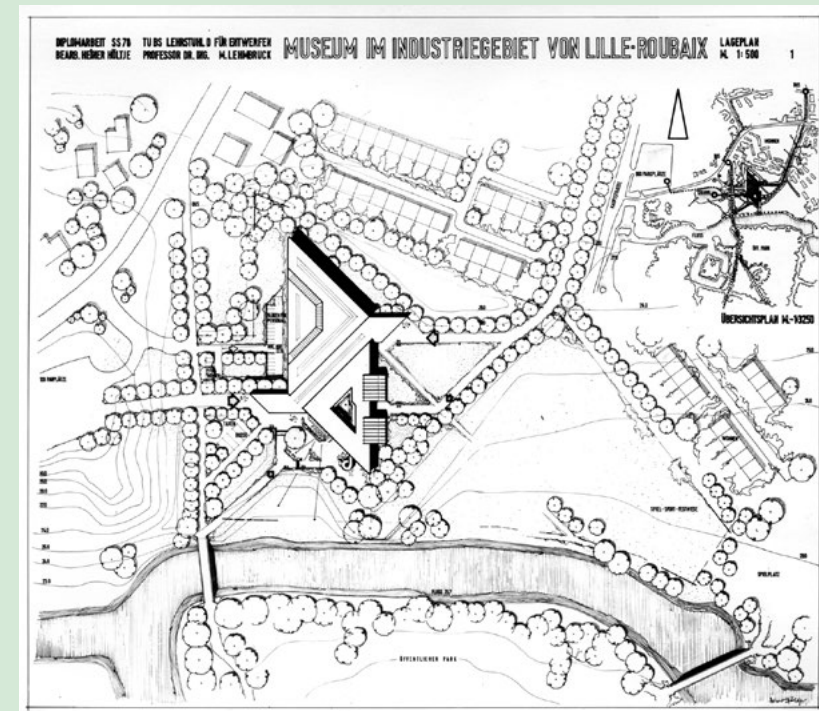
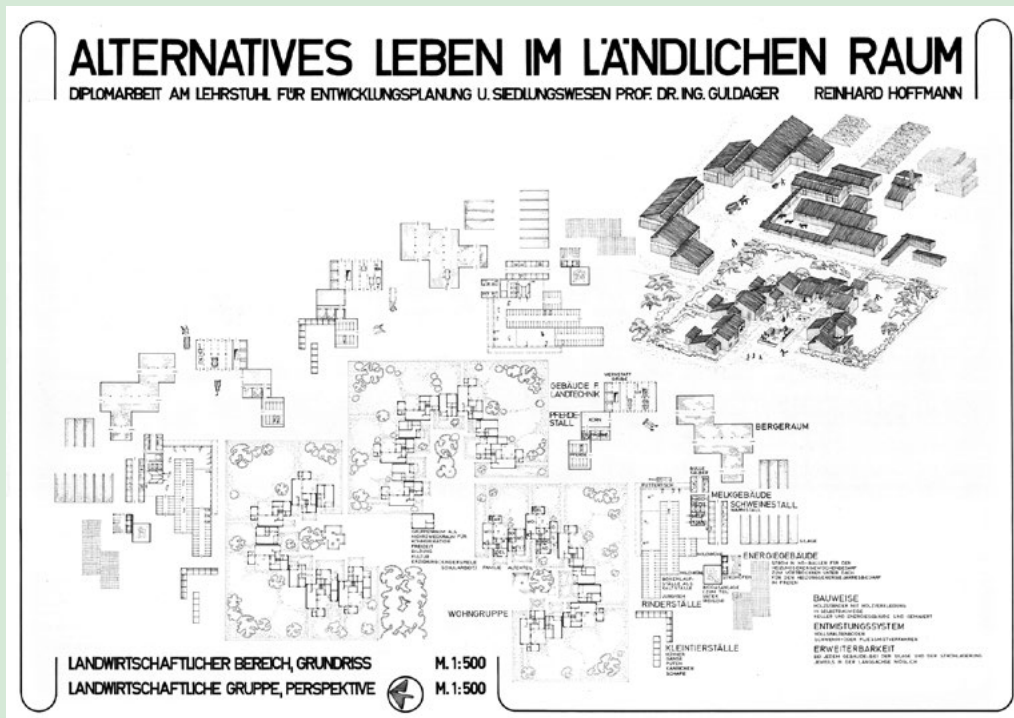
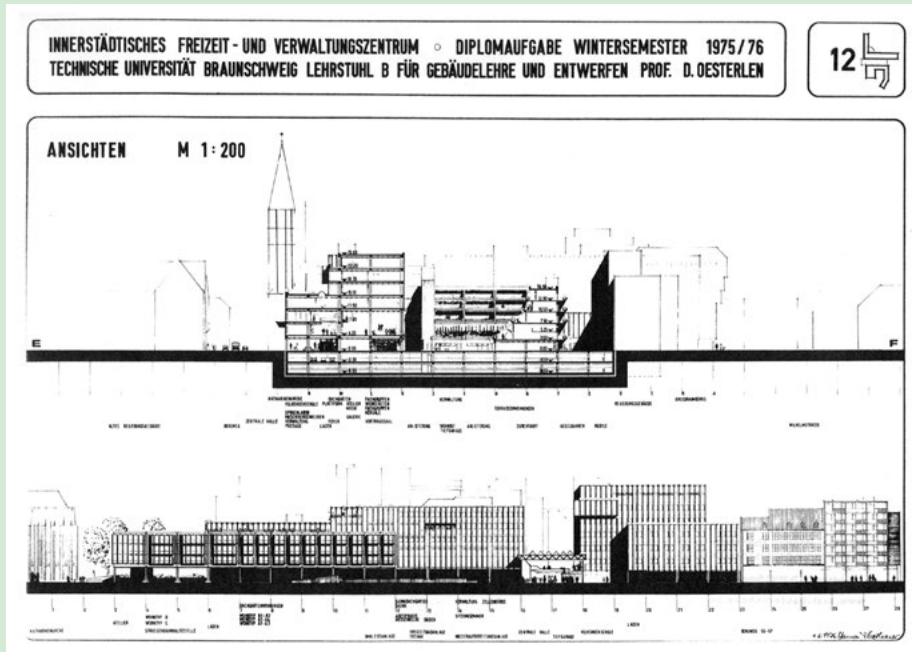


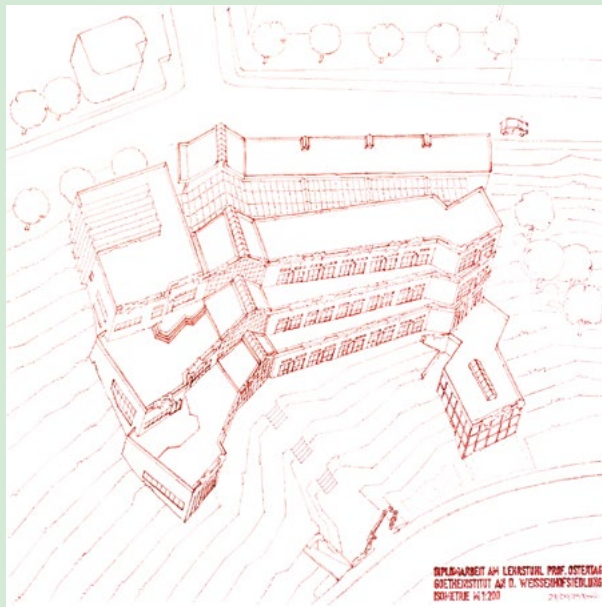
↑ Hannes Thorhauer, Inner City Recreation and Administration Center, 1976, Oesterlen

↓ Reinhard Hoffmann, Alternative Living in Rural Areas, 1978, Guldager

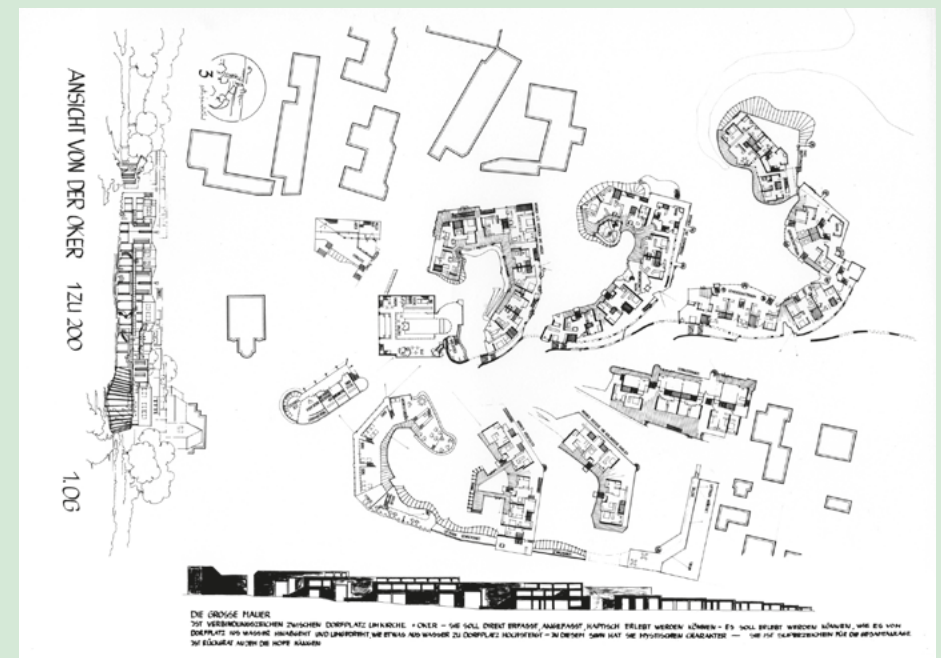
↑ Heiner Hölzje, Museum in the Industrial Area of Lille-Roubaix, 1978, Lehmbruck

↓ Manfred Kirchhoff, Residential and Social Center for Youth in Braunschweig, 1978, Wagner



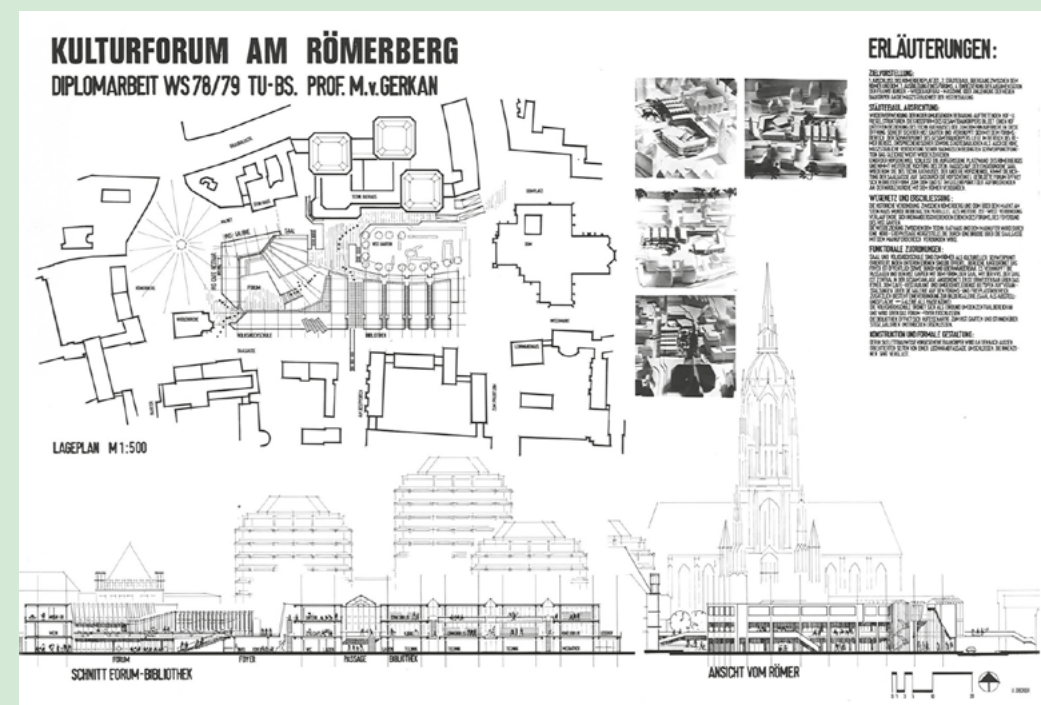


- ↑ Rolf Toyka, Goethe Institute at Weißenhofsiedlung, 1978, Ostertag
- ↓ Maria Biermeyer (now Decker), Living in Meverode. Residential and community facilities in Braunschweig-Meverode, 1979, Wagner



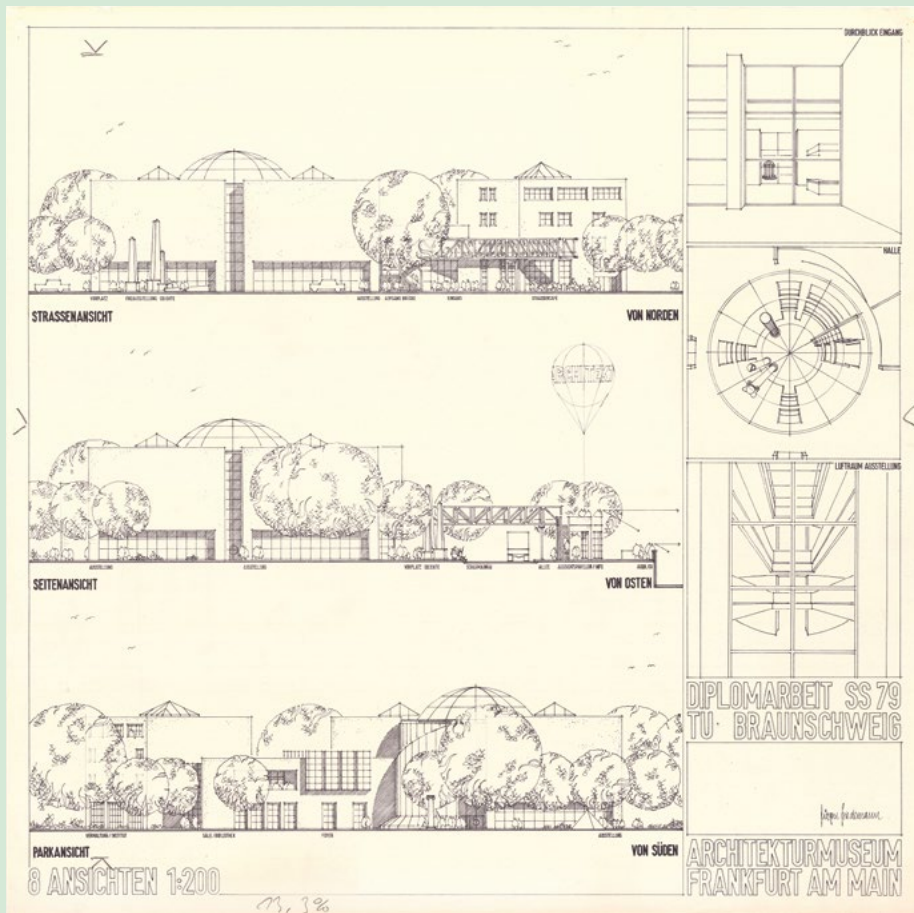
↑ Peter Freudenthal, *Living in Melderode. Residential and community facilities in Braunschweig-Melderode, 1979*, Wagner

↓ Ulrich Decker, Kulturforum at the Frankfurt Römerberg, 1979, von Gerkan



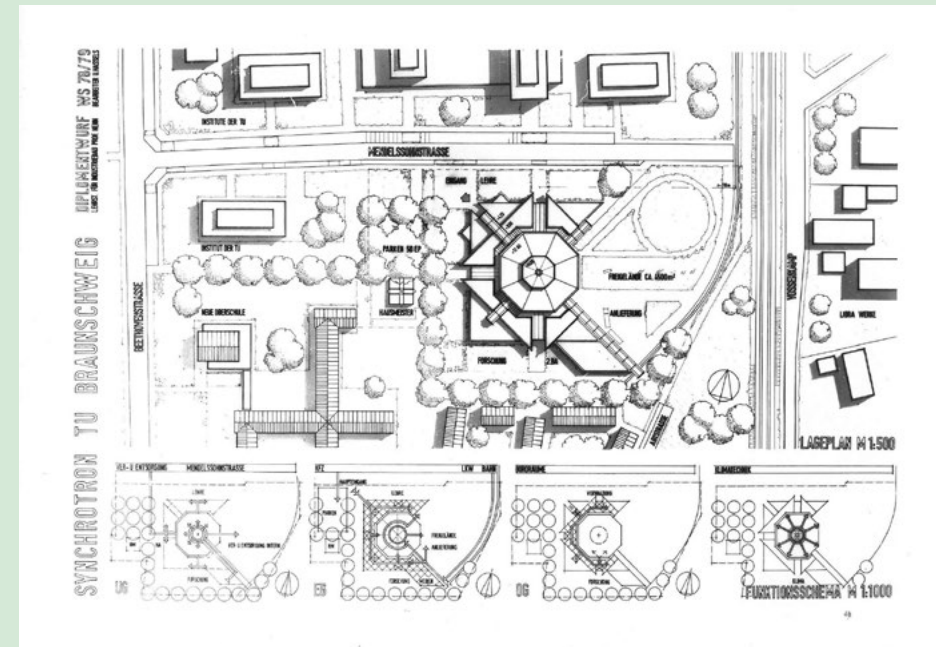
↑ Jürgen Friedemann, Architektur-
museum in Frankfurt am Main,
1979, Ostertag

↓ Annette Meyer-Schwickerath,
Architekturmuseum in Frankfurt
am Main, 1979, Ostertag

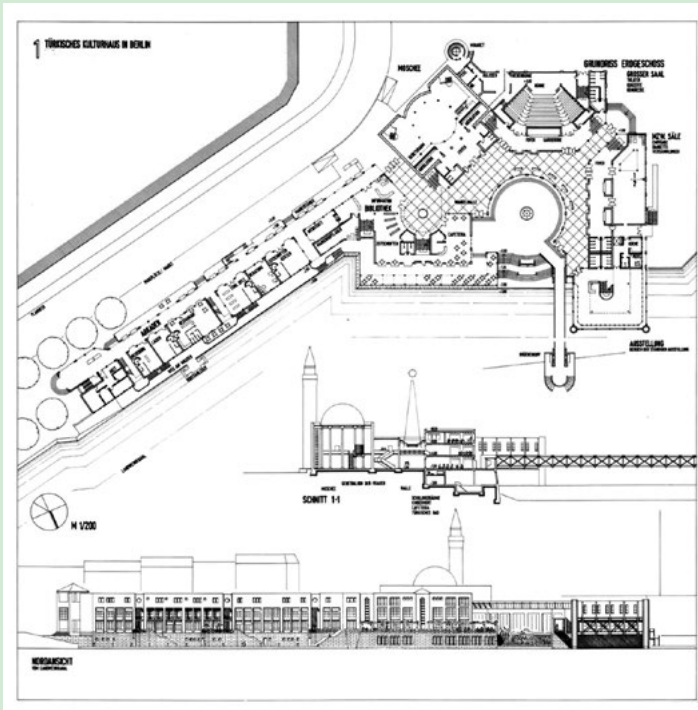


↑ Ulrich Hassels, Synchrotron TU
Braunschweig, 1979, Henn

↓ Sönke Lorentzen, Brücke der
Nationen (bridge of nations)
Braunschweig, 1979, Wagner

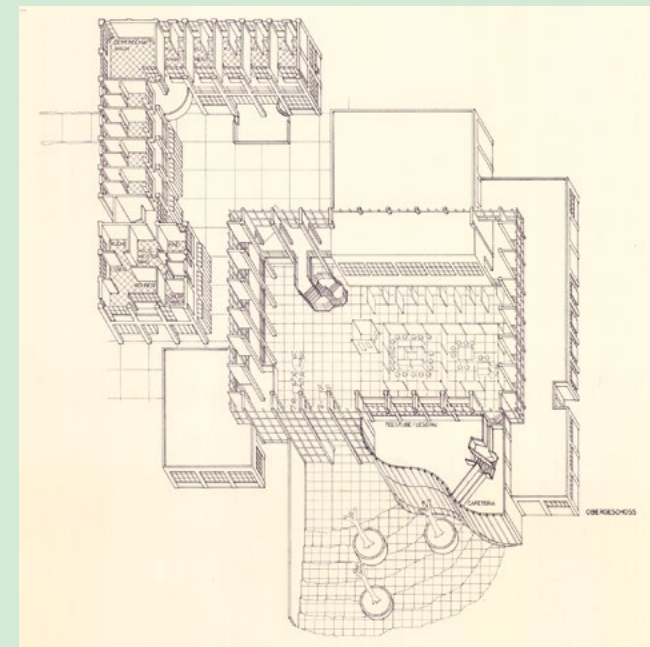
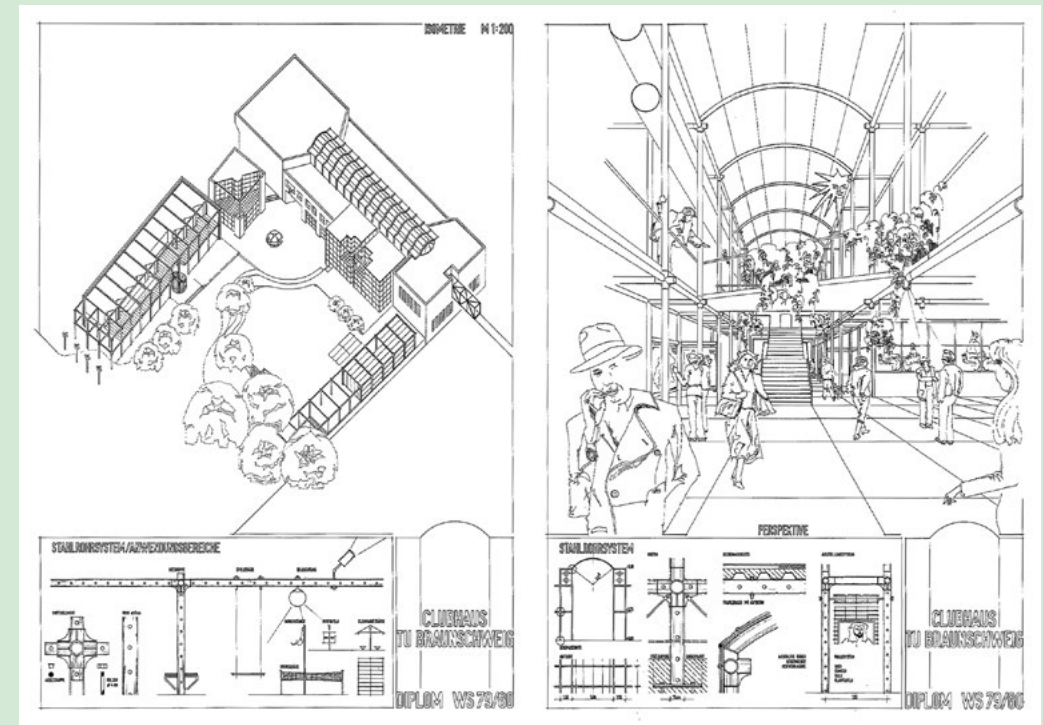


- ↑ Manfred Bukowski, Türkisches Kulturhaus (Turkish Cultural Center) Berlin, 1980, von Gerkan
- ↓ Bernhard Gössler, Conference Hotel in Kiel, 1980, Wagner



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- ↑ Hans Kirchner, Student Clubhouse Braunschweig, 1980, Ostertag
- ↓ Michael Richter, Student Clubhouse Braunschweig, 1980, Ostertag

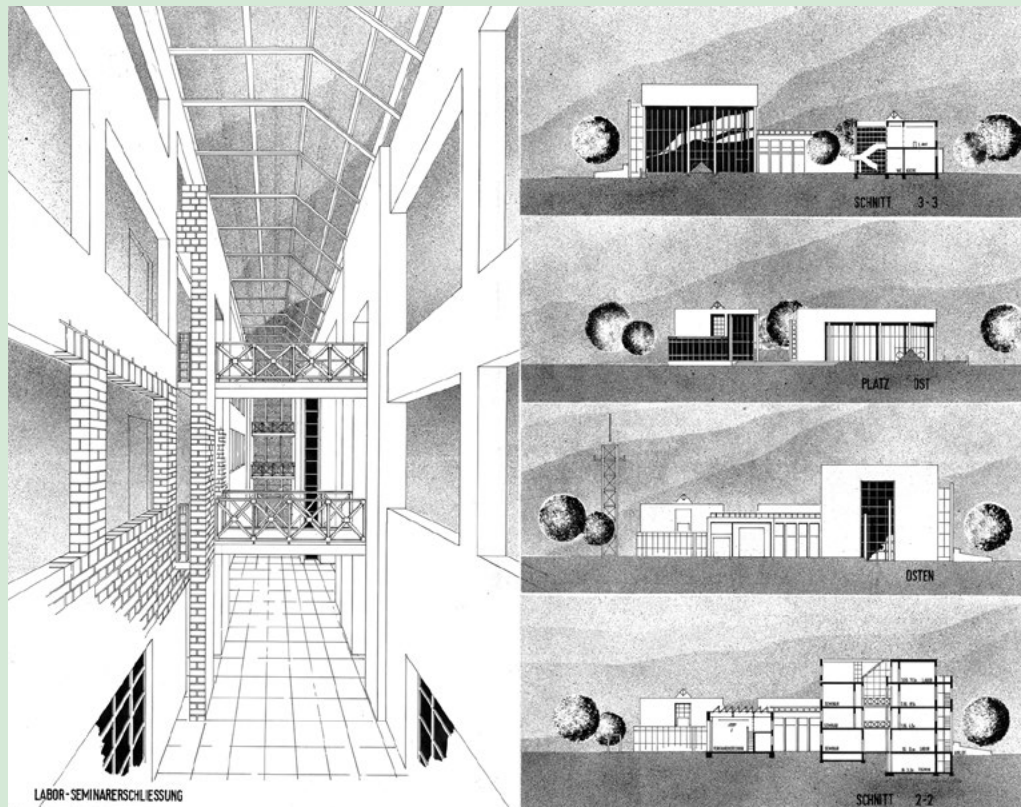
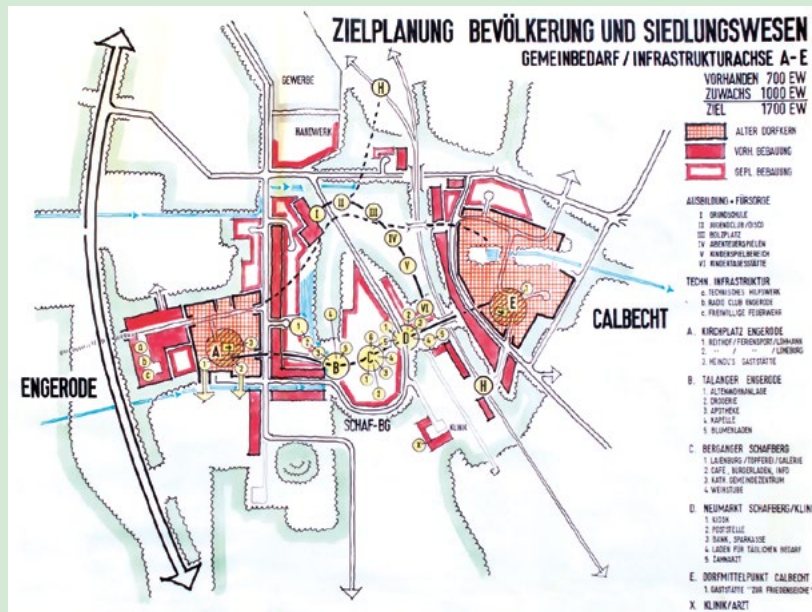


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1980

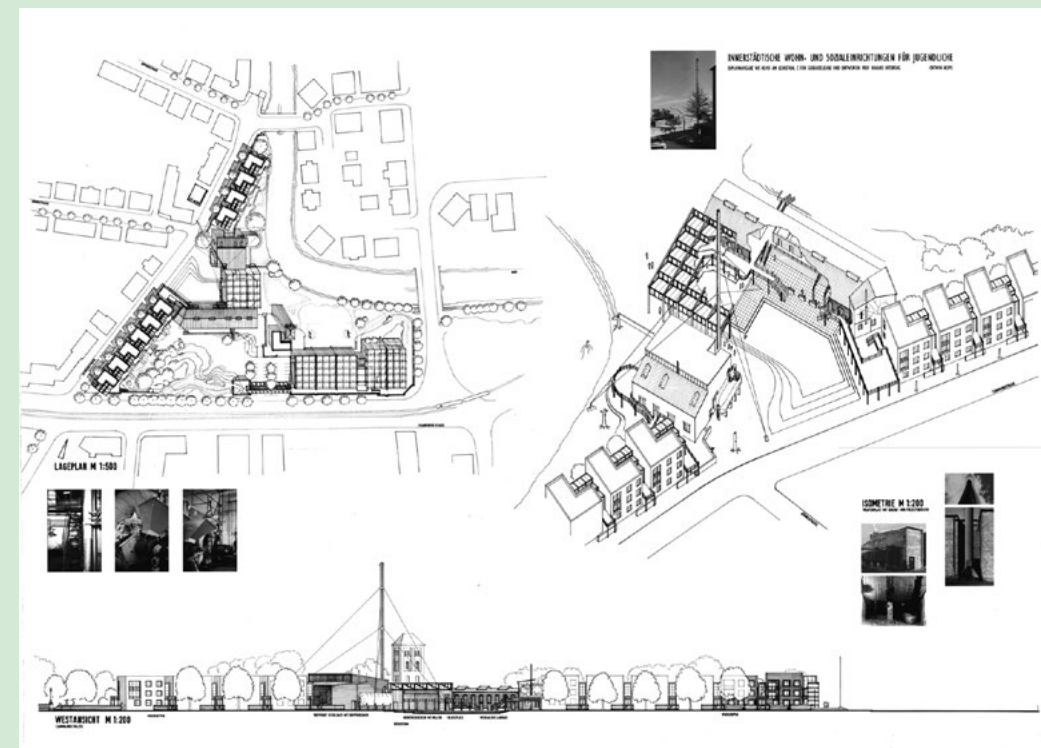
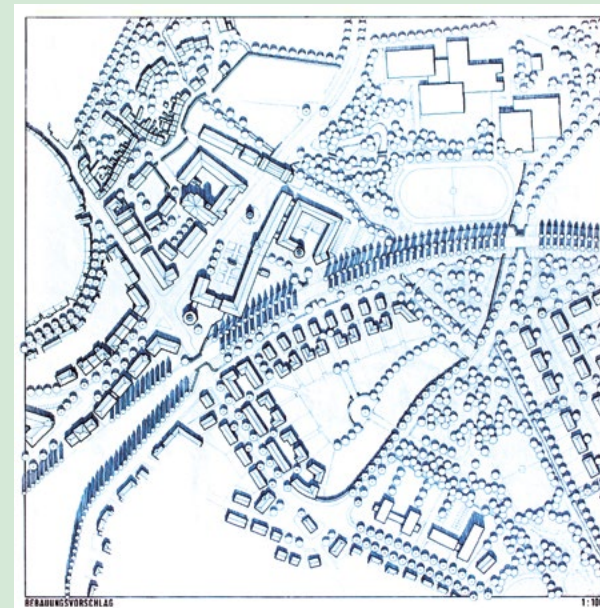
↑ Günter Klatt, Town Development
Engerode / Calbecht, 1980,
Guldager

↓ Hartmut Zander, University
of Applied Sciences Wolfsburg,
1980, von Gerkan



↑ Rolf Blume, Domäne Helmstedt,
1981, Stracke

↓ Ortwin Heipe, Youth Residence
and Social Services Institution,
1981, Ostertag

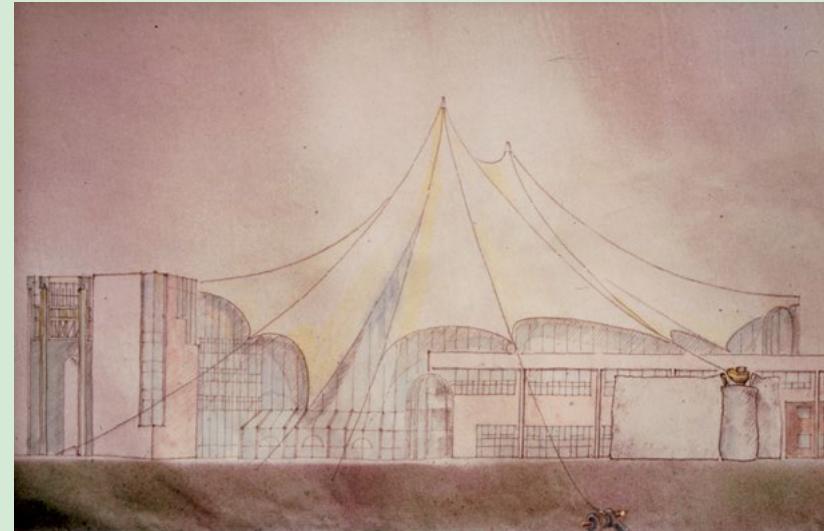


↓ Ulrich Rauss, Circus at Görlitzer
Bahnhof, 1981, Wagner



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↑ Karl Schäfer, Circus Winter Home,
1981, Wagner



↓ Osman Kapici, Bergbaumuseum
(mining museum) in Goslar, 1982,
Wagner

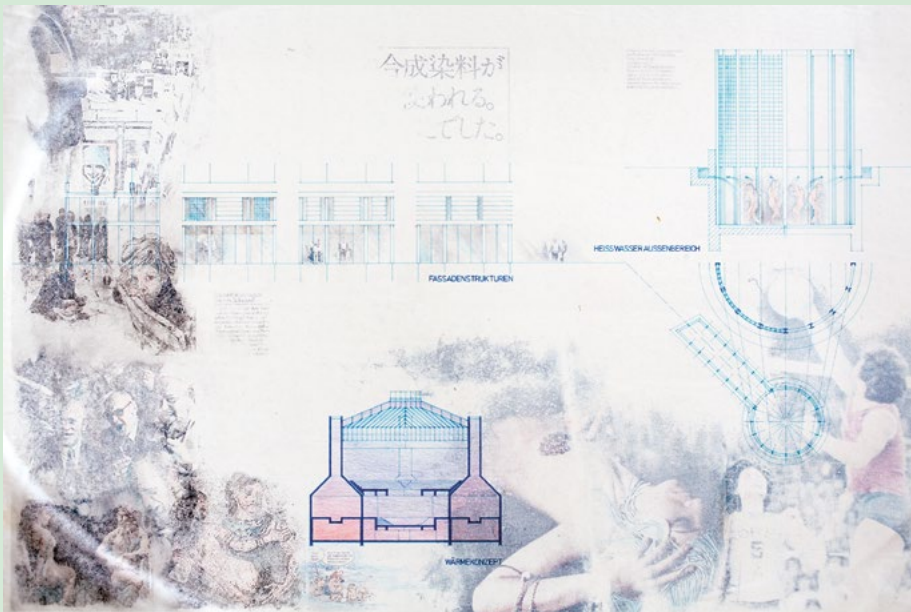
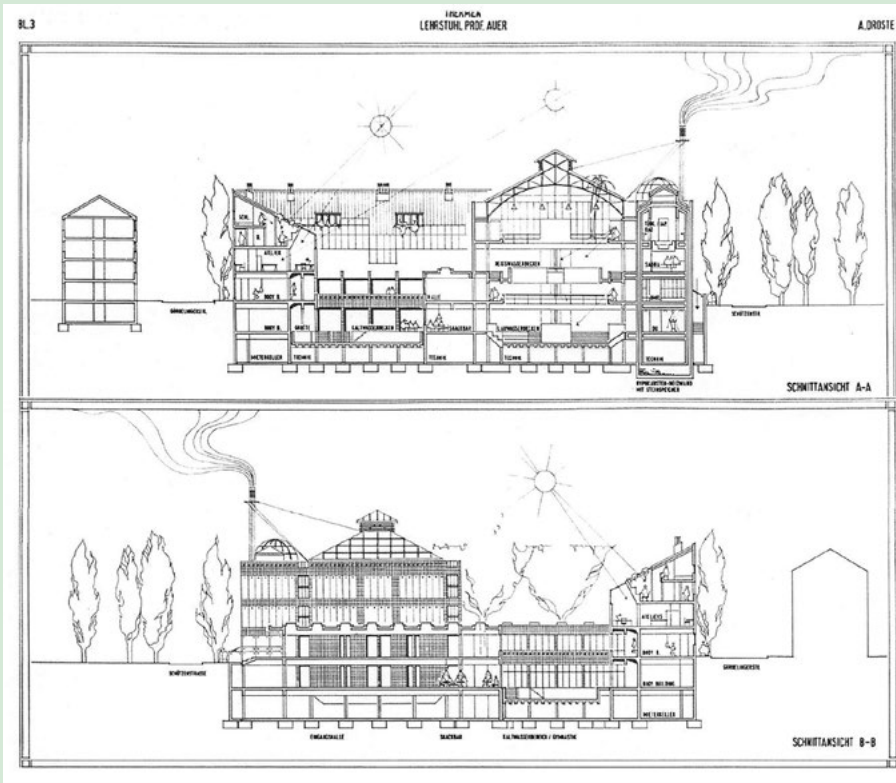


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1981, 1982

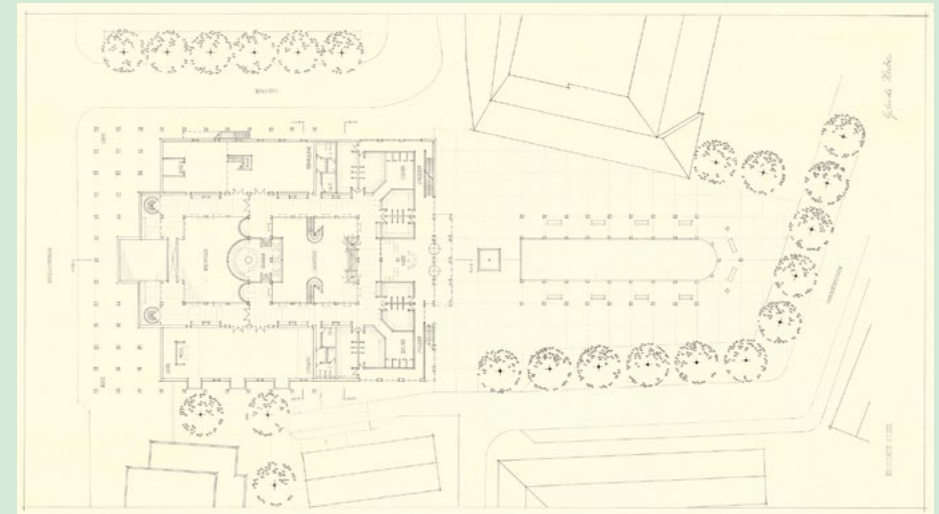
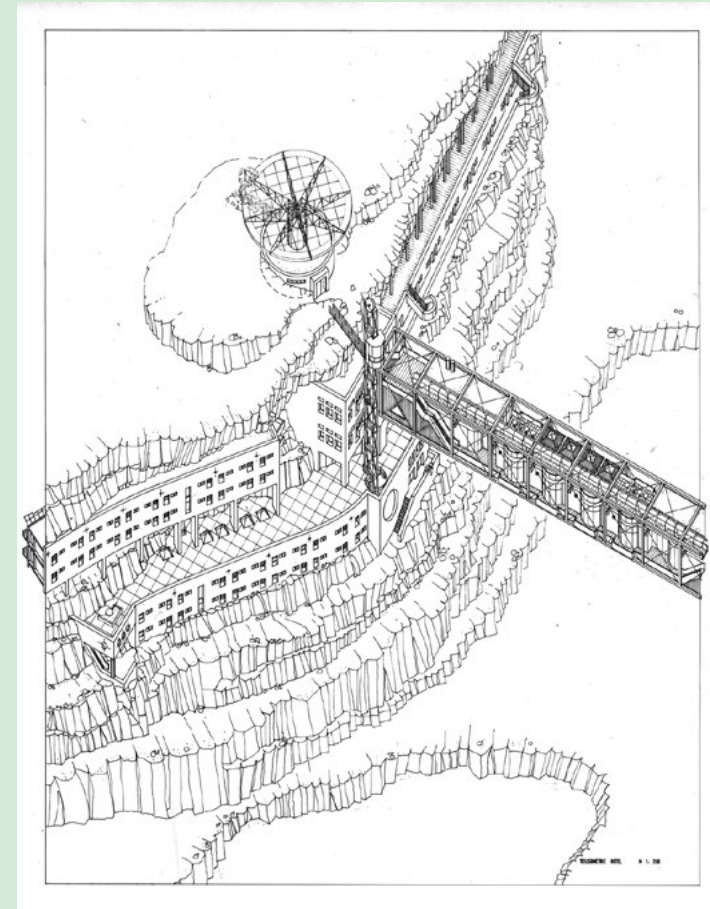
↑ Annegret Droste, Thermal Baths, 1983, Auer

↓ Michael Drewitz, Thermal Baths, 1983, Auer



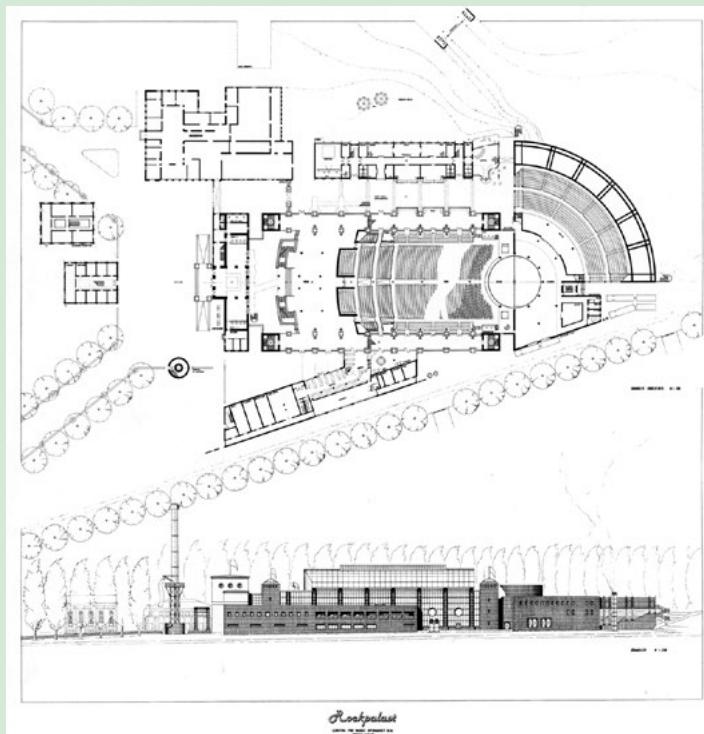
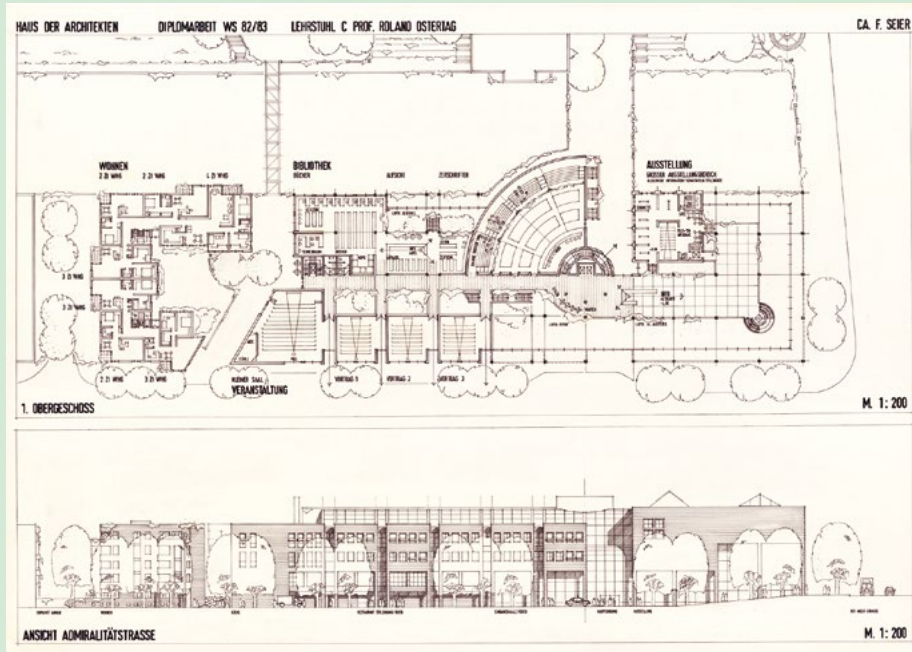
↑ Gabriele Gropp (now Gropp-Stauth), Expedition Station Grand Canyon, 1983, von Gerkan

↓ Gerlinde Hube, Thermal Baths, 1983, Auer



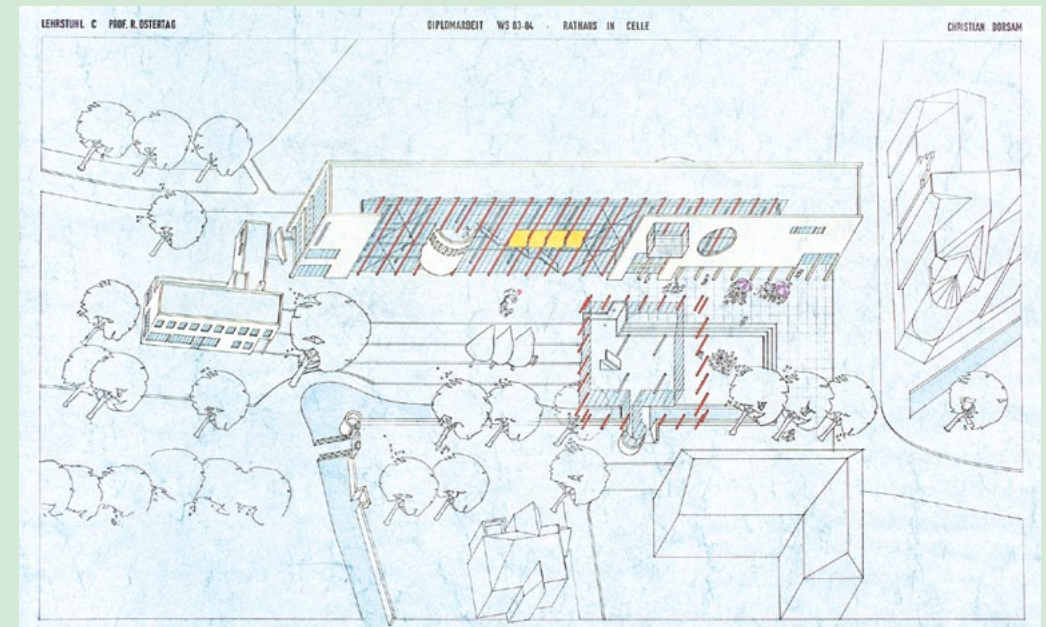
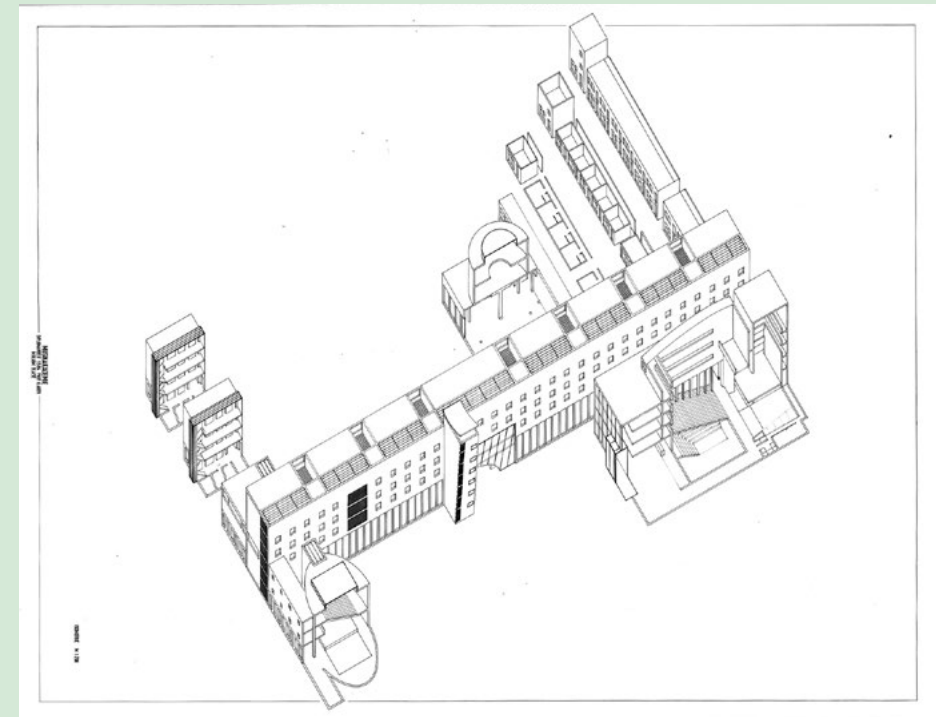
↑ Friedhelm Seier, Haus der Architekten zwischen Fleeten (association of architects in-between canals) Hamburg, 1983, Ostertag

↓ Rüdiger Stauth, Rockpalast, 1983, Wagner



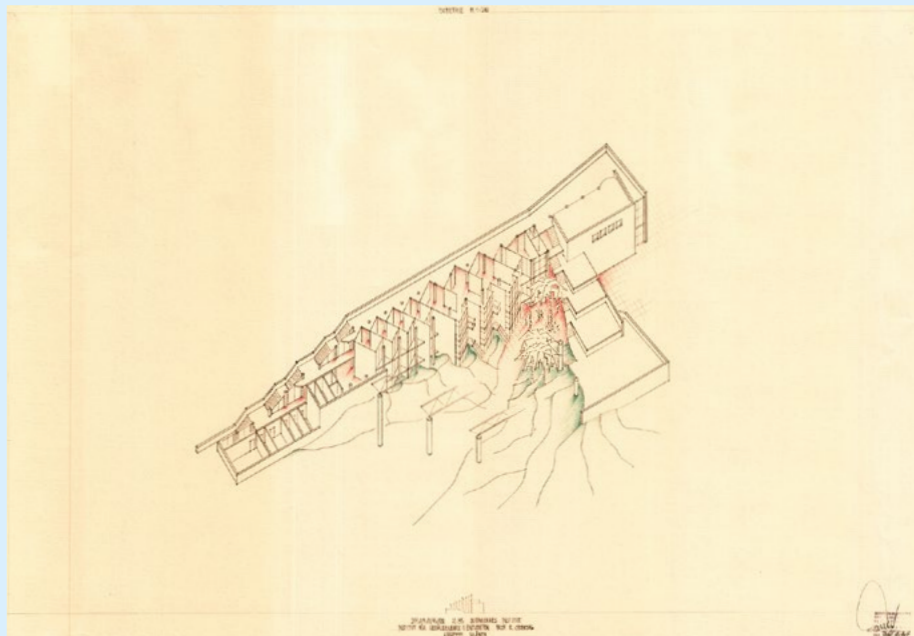
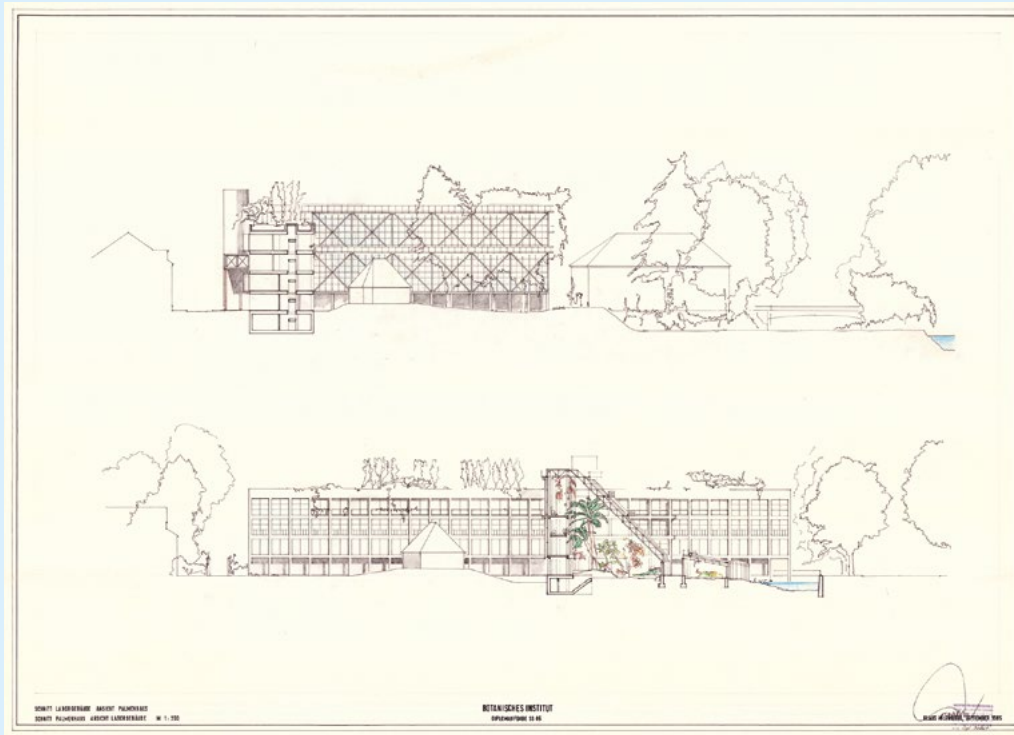
↑ Mirjam Blase, Conservatory of Music, 1984, Auer

↓ Christian Dörsam, Celle Town Hall, 1984, Ostertag



↑ Klaus Ihlenburg, Botanical Institute, 1985, Ostertag

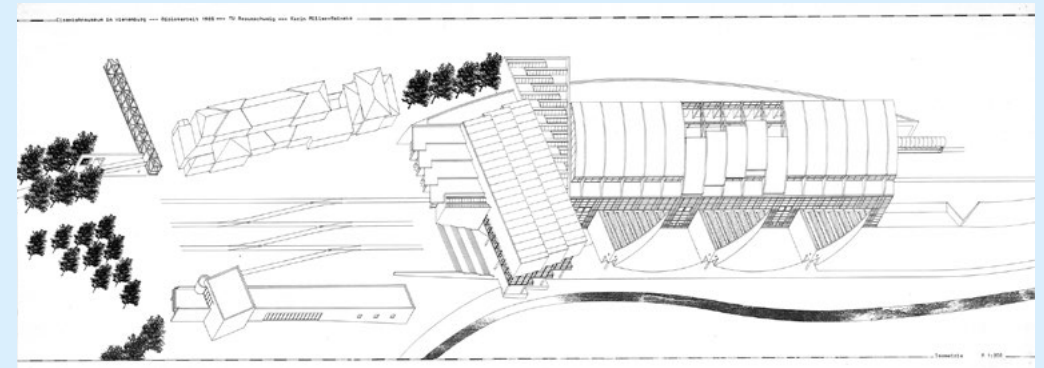
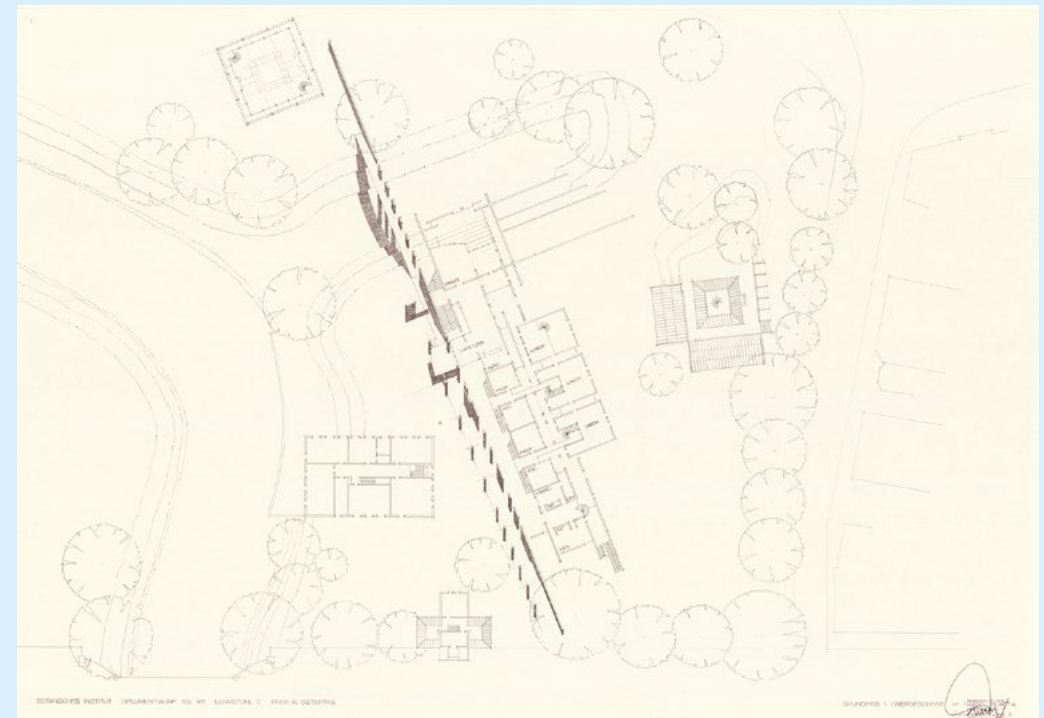
↓ Annette Kläner (now Kläner-Brandt), Botanical Institute, 1985, Ostertag



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↑ Margret Weber (now Weber-Reich), Botanical Institute, 1985, Ostertag

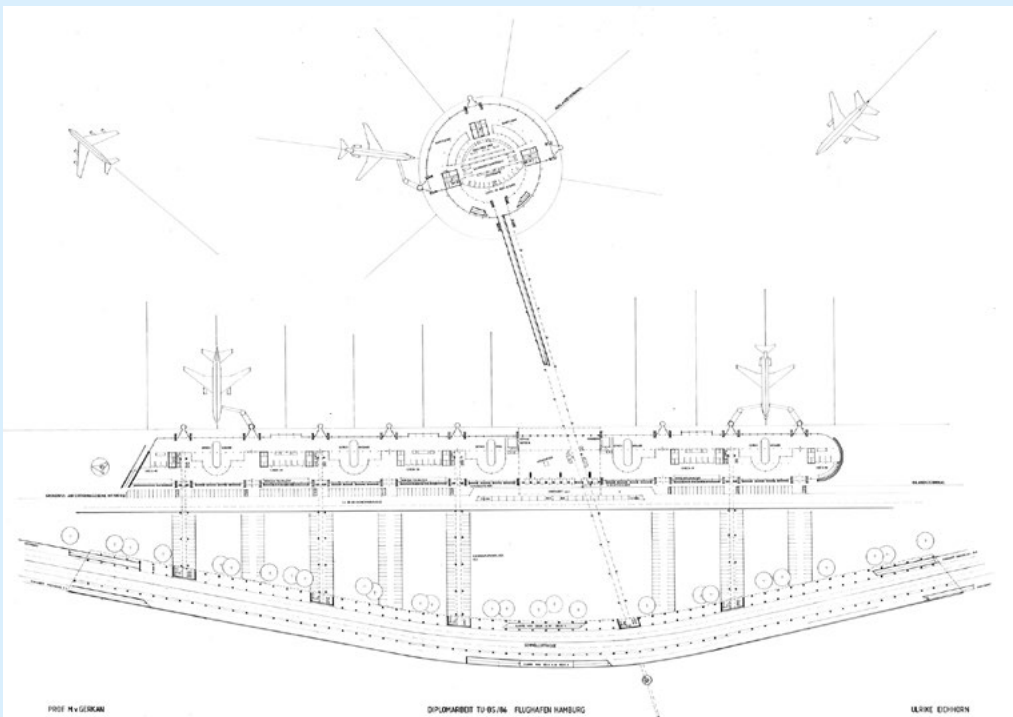
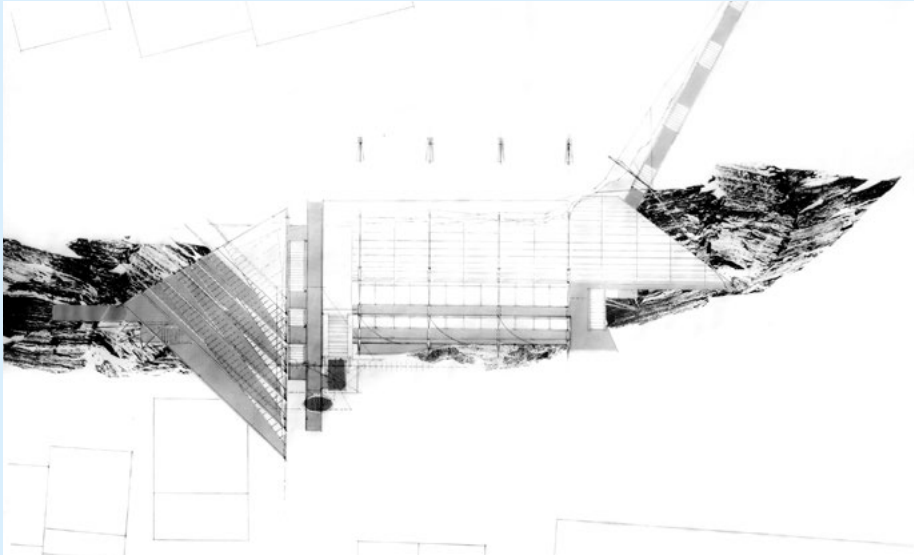
↓ Karin Müller-Reineke, Railroad Museum in Vienenburg, 1985, Wagner



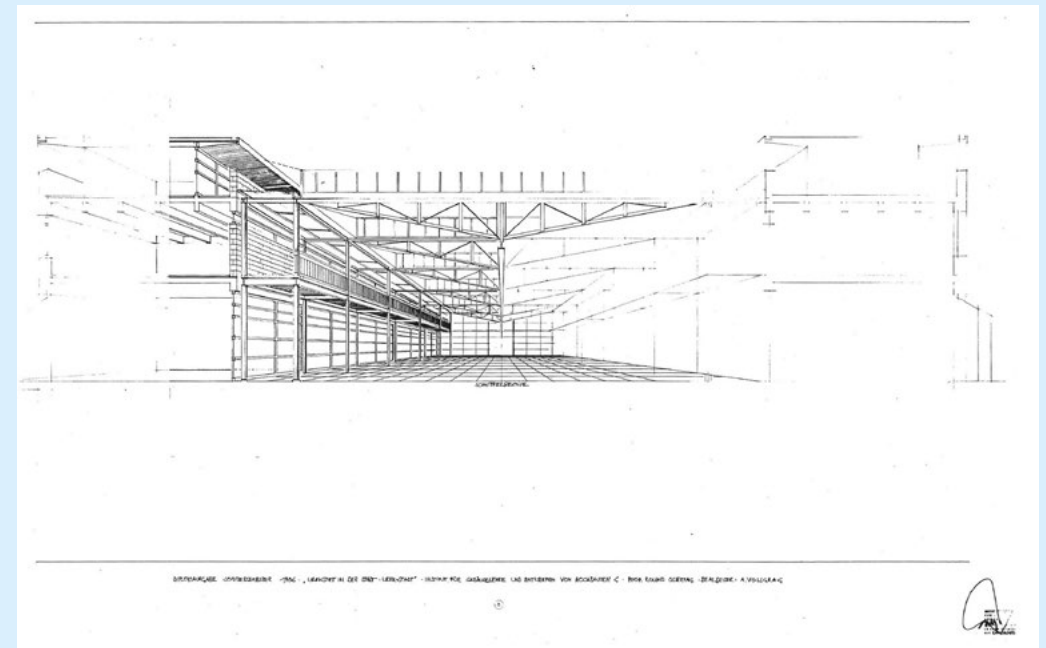
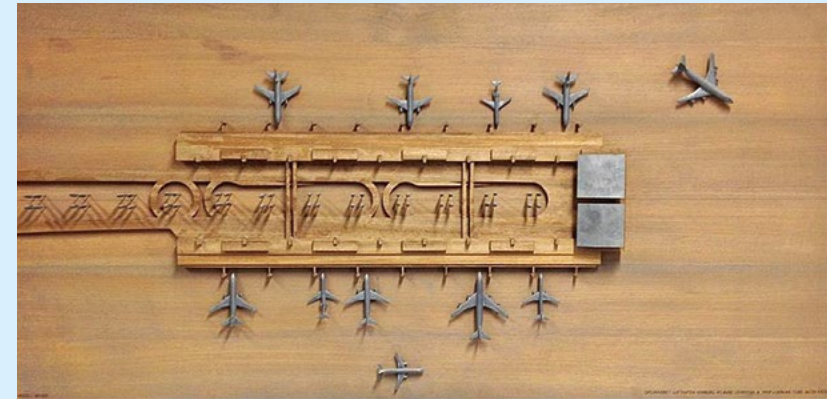
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1985

- ↑ Susanne Dexling (now Dexling Düttmann), Vertical Passage on Heligoland, 1986, Wagner
- ↓ Ulrike Eichhorn, Hamburg Airport, 1986, von Gerkan



- ↑ Jacob Kierig, Hamburg Airport, 1986, von Gerkan
- ↓ Andreas Voßgrag, Workshop in the Municipal Workshops, 1986, Ostertag



↑ Sebastian Redecke, Haus der Musik – Musikhaus, 1987, Ostertag

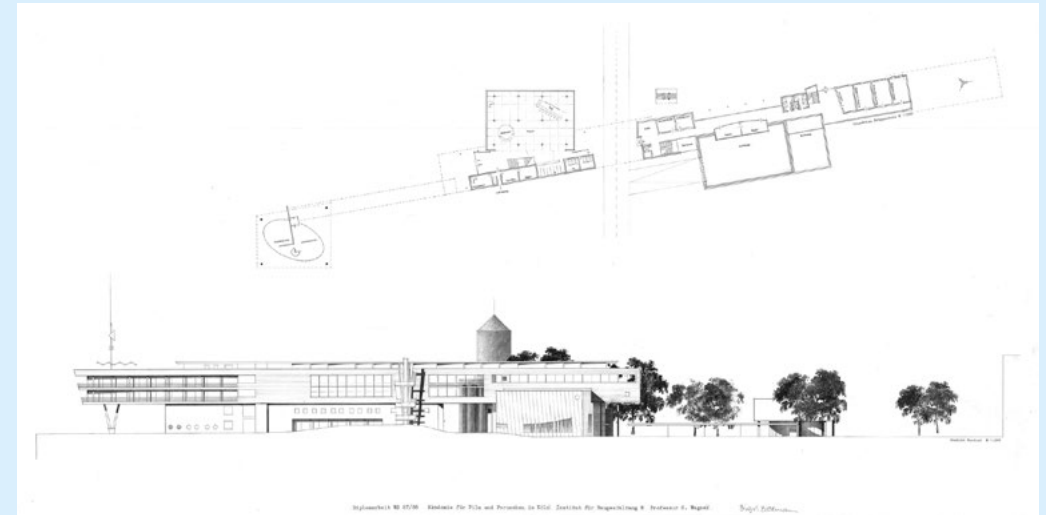
↓ Thomas Wenzig, Auction House in Frankfurt, 1987, Auer



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↑ Birgit Bahlmann (now Bahlmann-Henckel), Academy for Film and Television in Cologne, 1988, Wagner

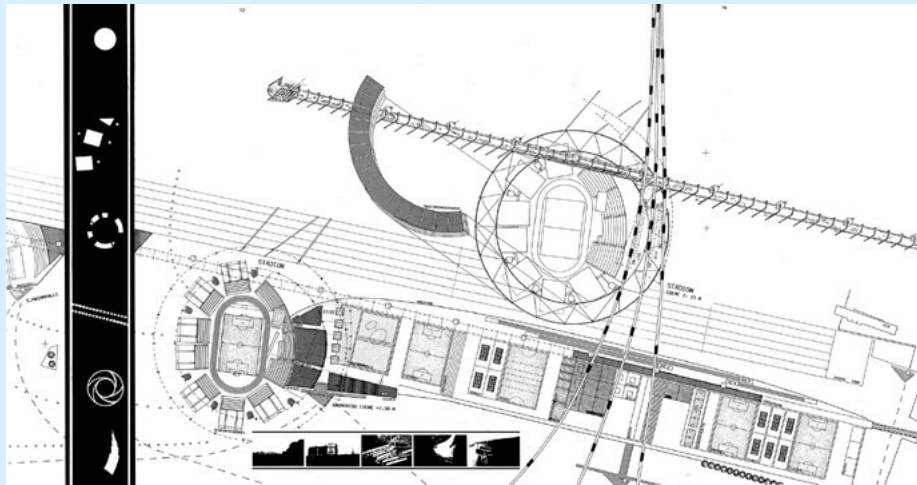
↓ Thomas Reglitzki, Academy for Film and Television in Cologne, 1988, Wagner



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1987, 1988

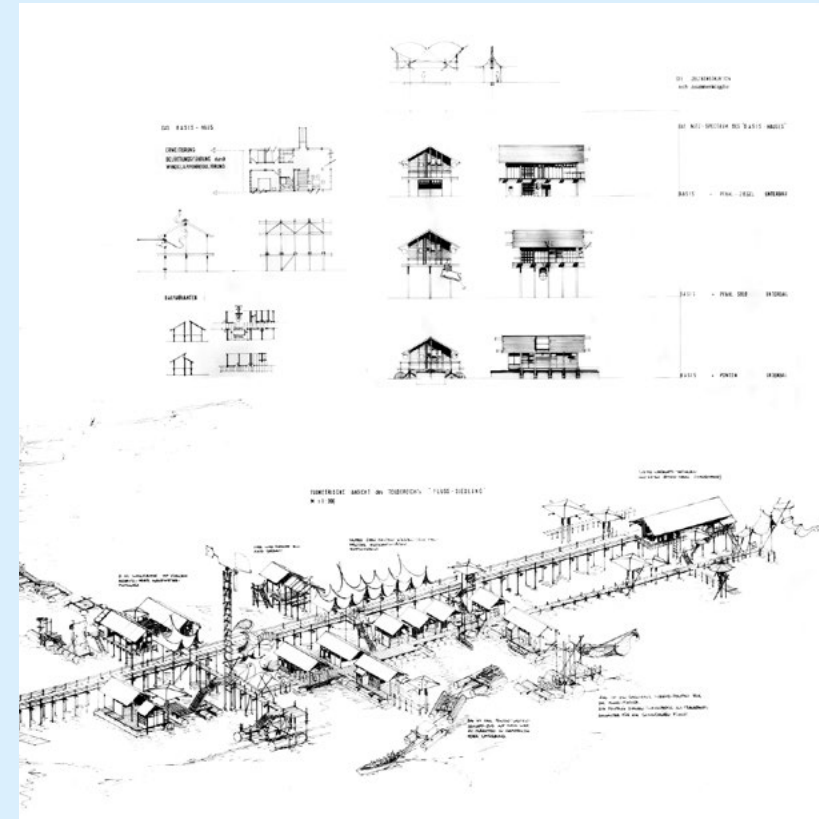
↑ Peter Ruge, Olympiade (Olympic Games) 2004 in Hamburg, 1988, Stracke



↓ Jan-Peter Witte, Olympiade (Olympic Games) 2004 in Hamburg, 1988, Stracke



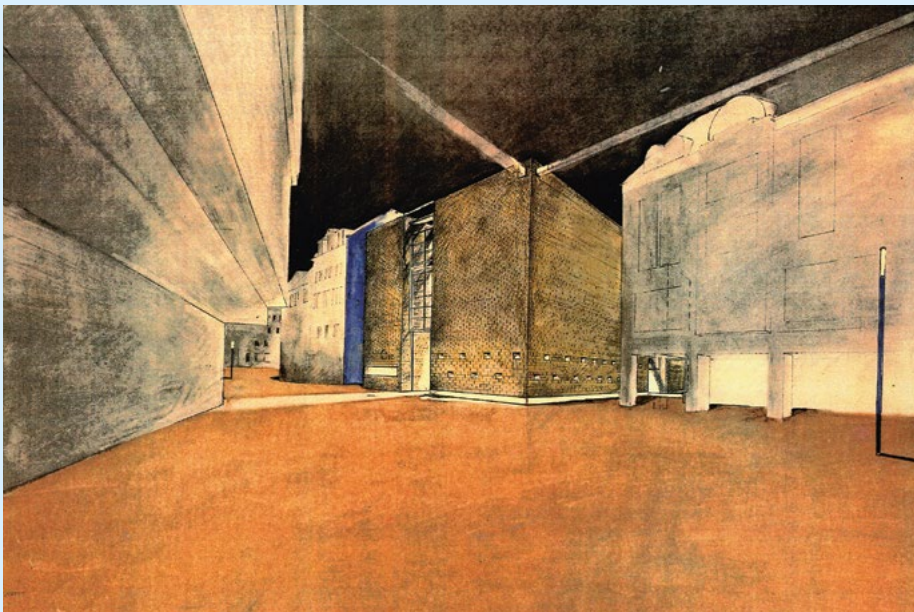
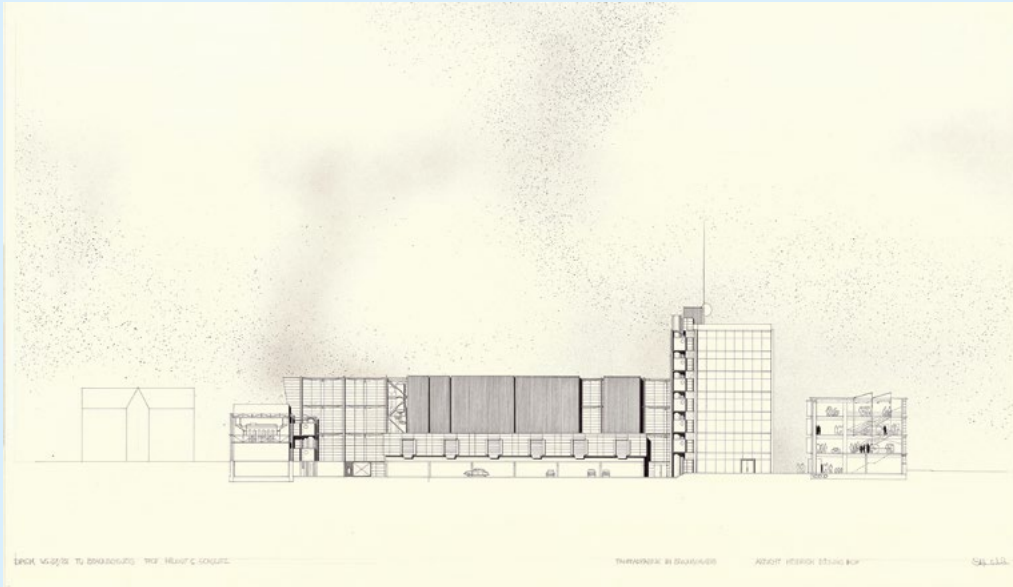
↑ Hannes Steinbacher, Einfachhaus in Indonesien (basic home in Indonesia), 1988, Guldager



↓ Andrea Becker-Bergemann, Mediathek (media center), 1988, Ostertag

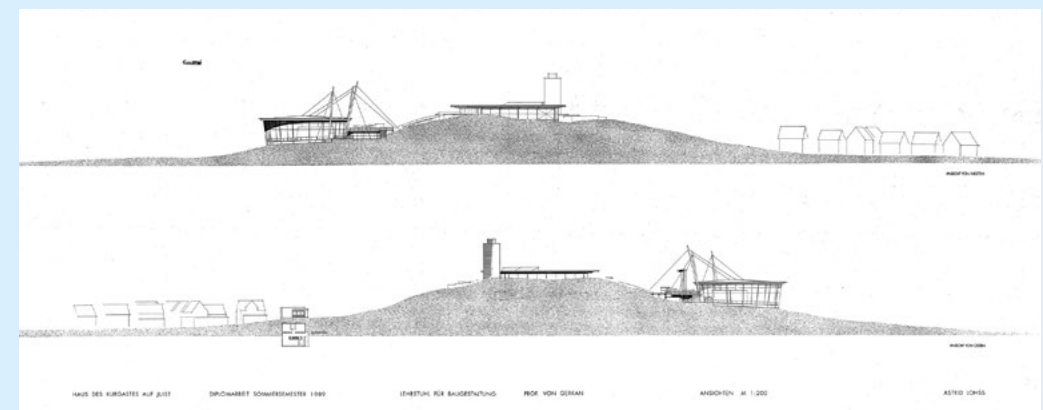
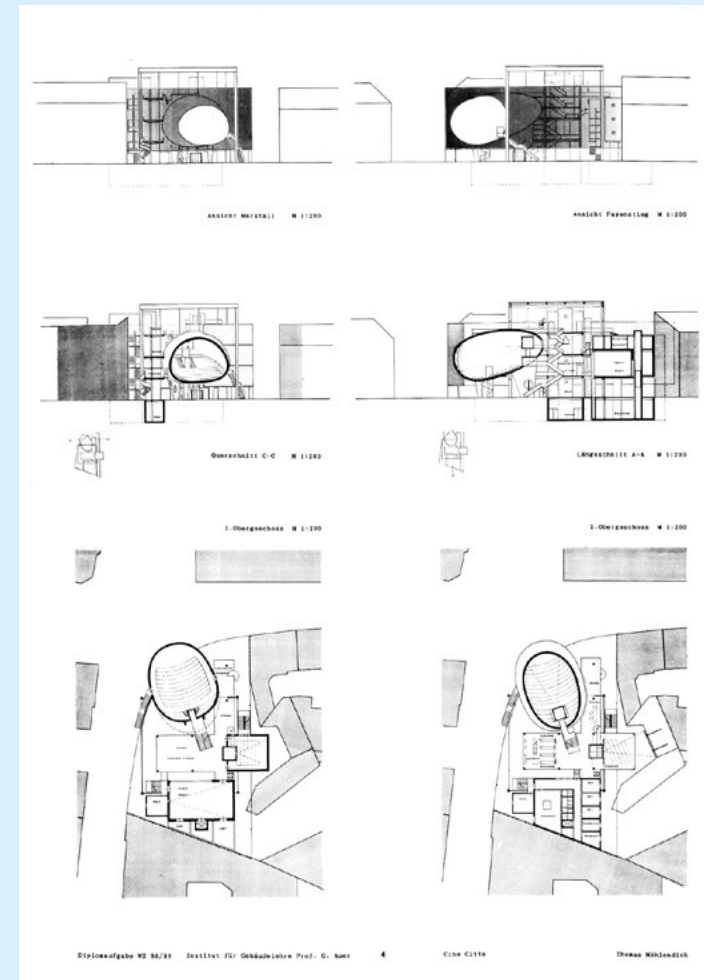


- ↑ Stefan Worbes, Bicycle Factory in Braunschweig, 1988, Schulitz
- ↓ Hans-Hermann Krafft, Cine Città, 1989, Auer

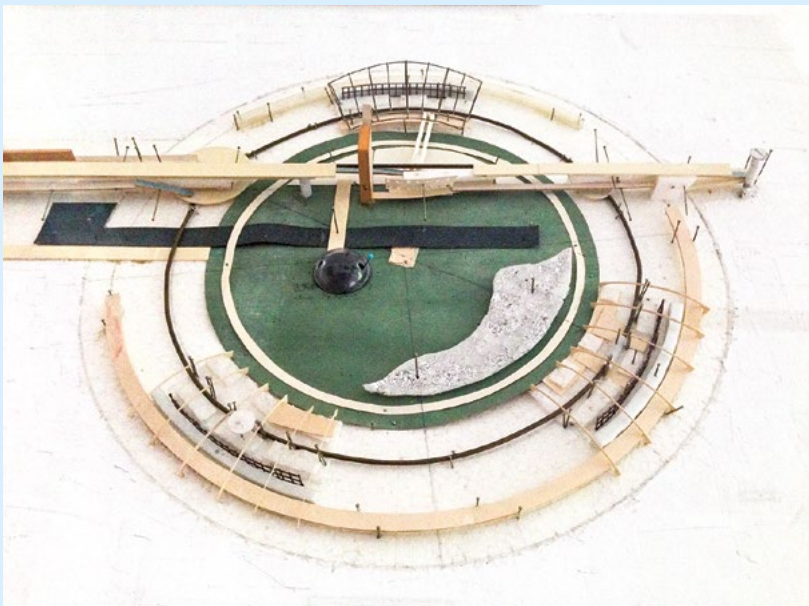
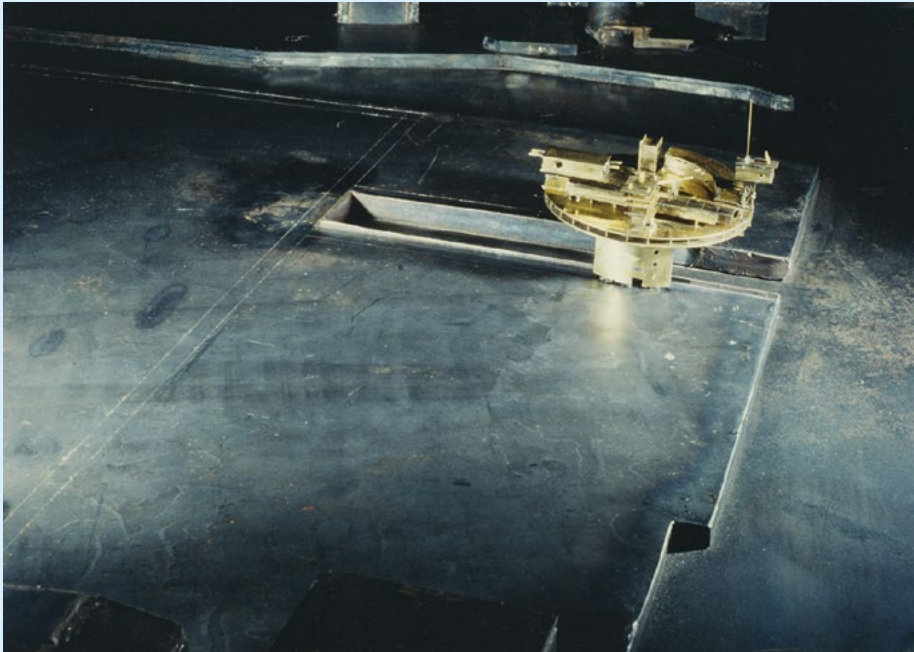


- ↑ Thomas Möhlendick, Cine Città, 1989, Auer

- ↓ Astrid Lohss, Haus des Kurgastes (house of the spa guest) Juist, 1989, von Gerkan

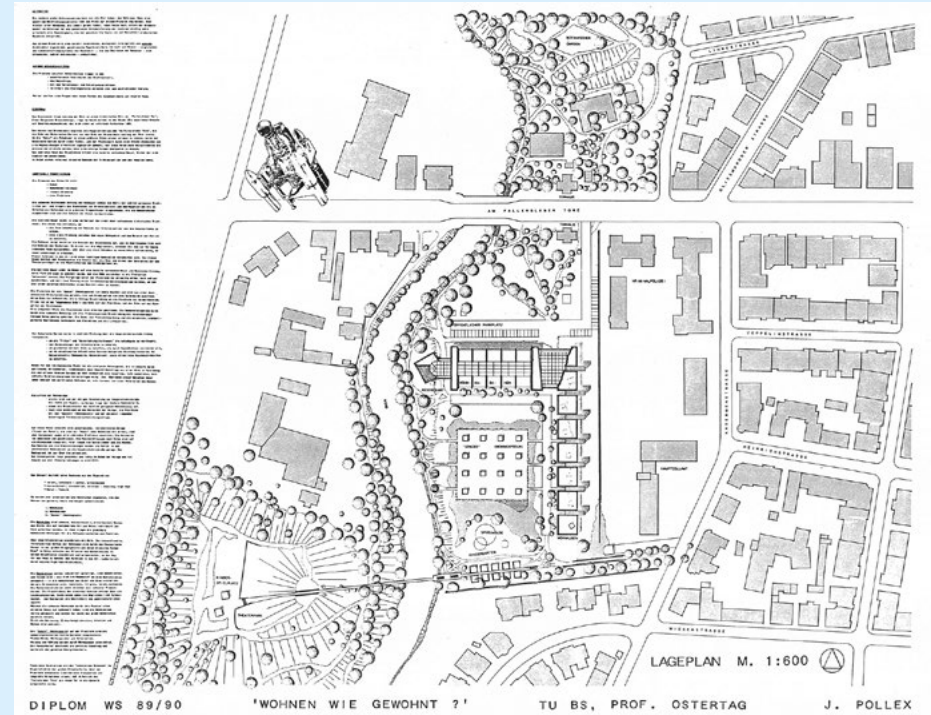


- ↑ André Poitiers, Greenpeace Base
Hamburg, 1989, Ostertag
- ↓ Klaus Lenz, Großflughafen (major
airport) Berlin, 1990, von Gerkan



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- ↑ Jörg Pollex, Wohnen wie gewohnt
(habitual living), 1990, Schultz
- ↓ Matthias Rätzel, Rotation. Publish-
ing and Printing Building for the
Magdeburger Allgemeine Zeitung,
1991, Ostertag

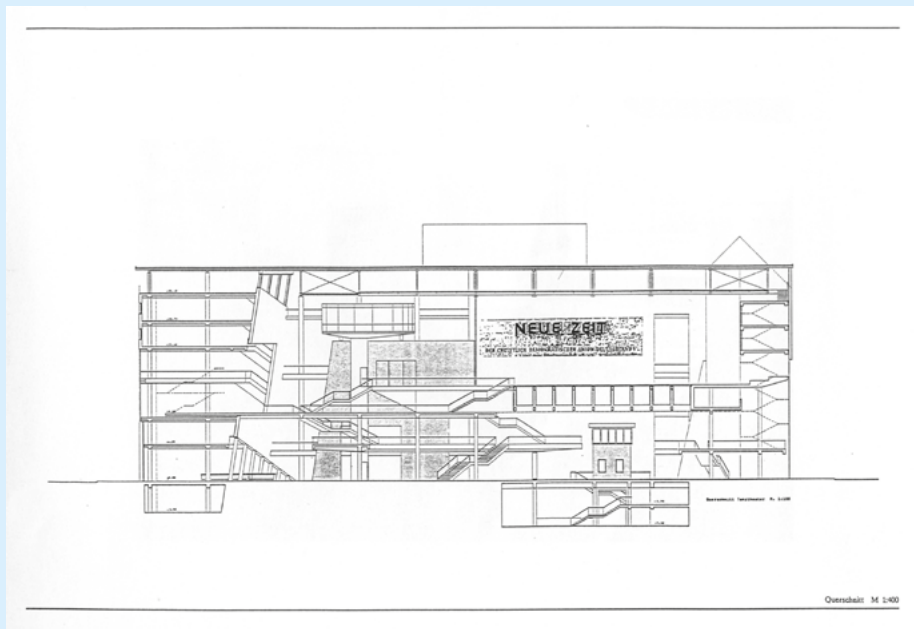
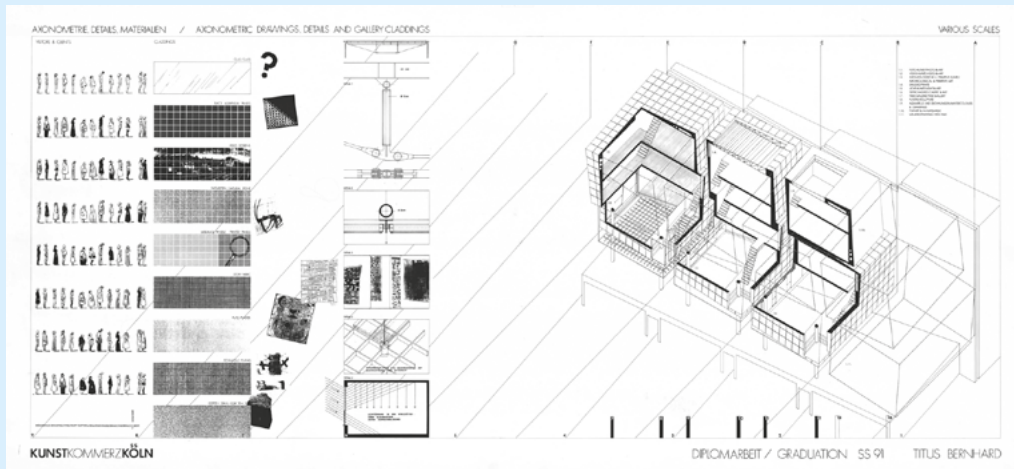


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1989, 1990, 1991

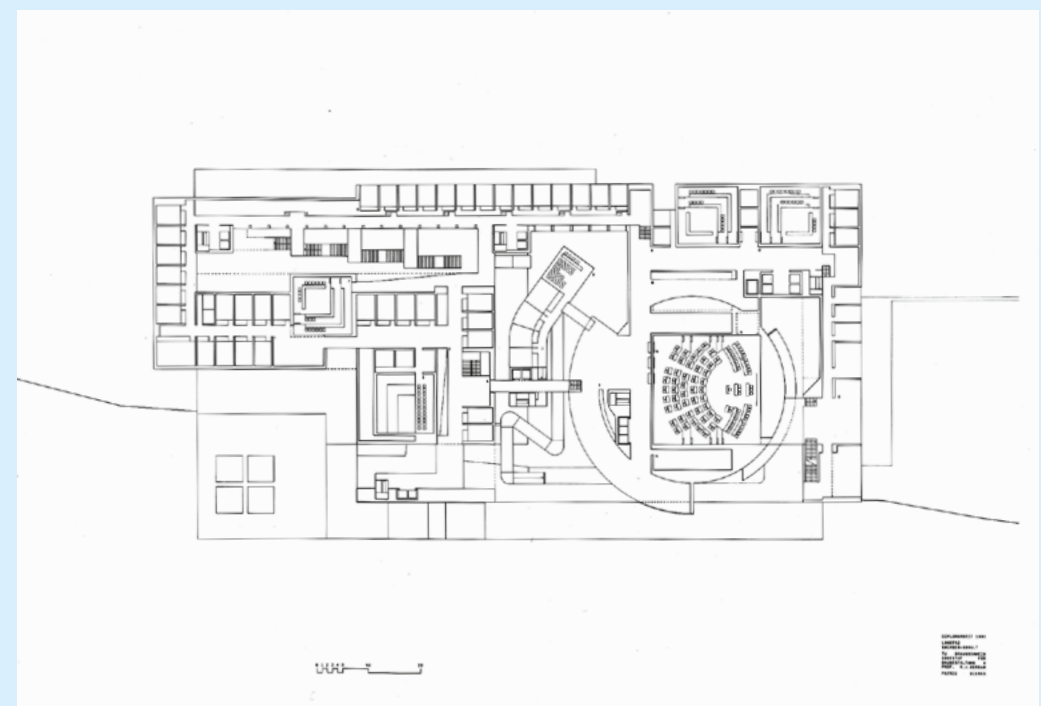
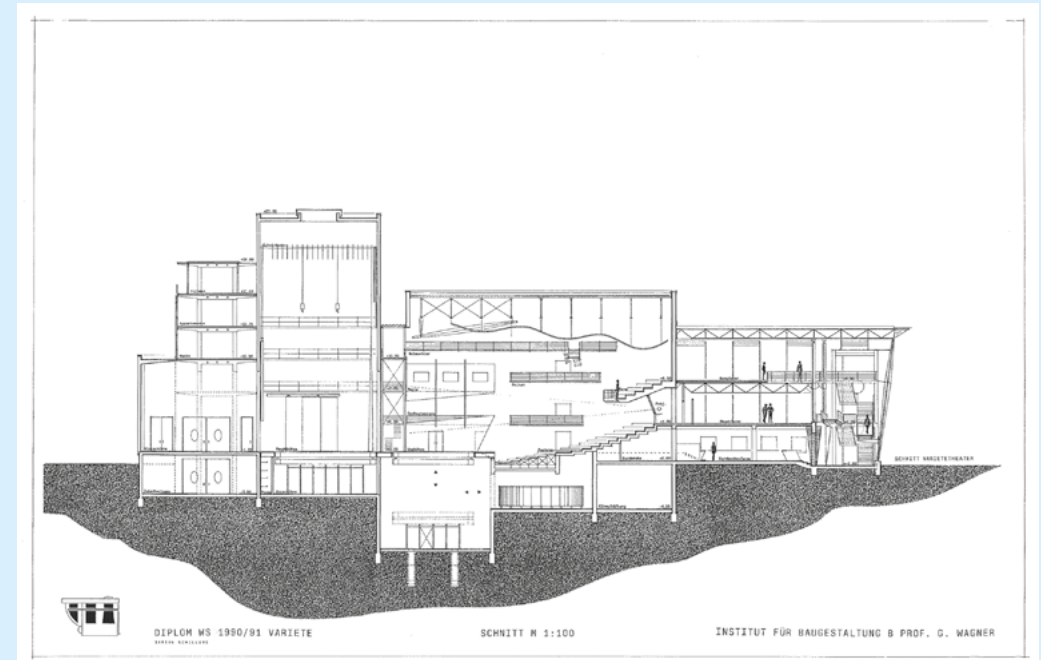
↑ Titus Bernhard, Kunst Kommerz Köln (Art Commerce Cologne), 1991, Wagner

↓ Klaus Richter, Variété, 1991, Wagner

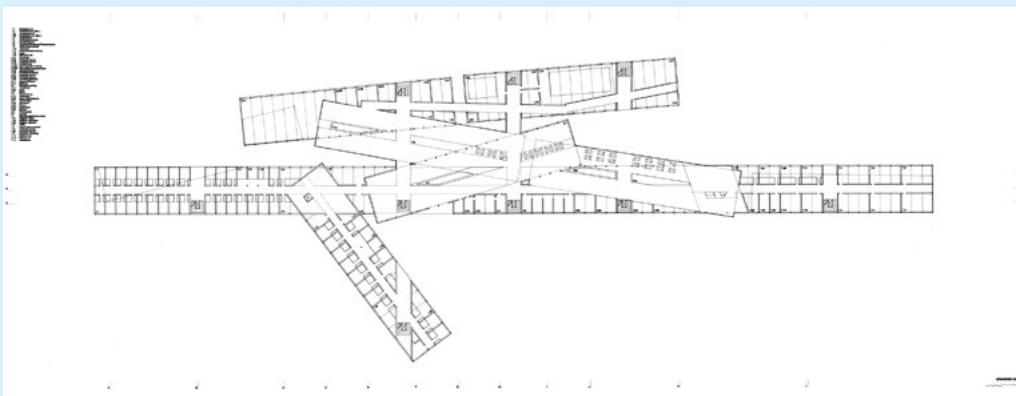
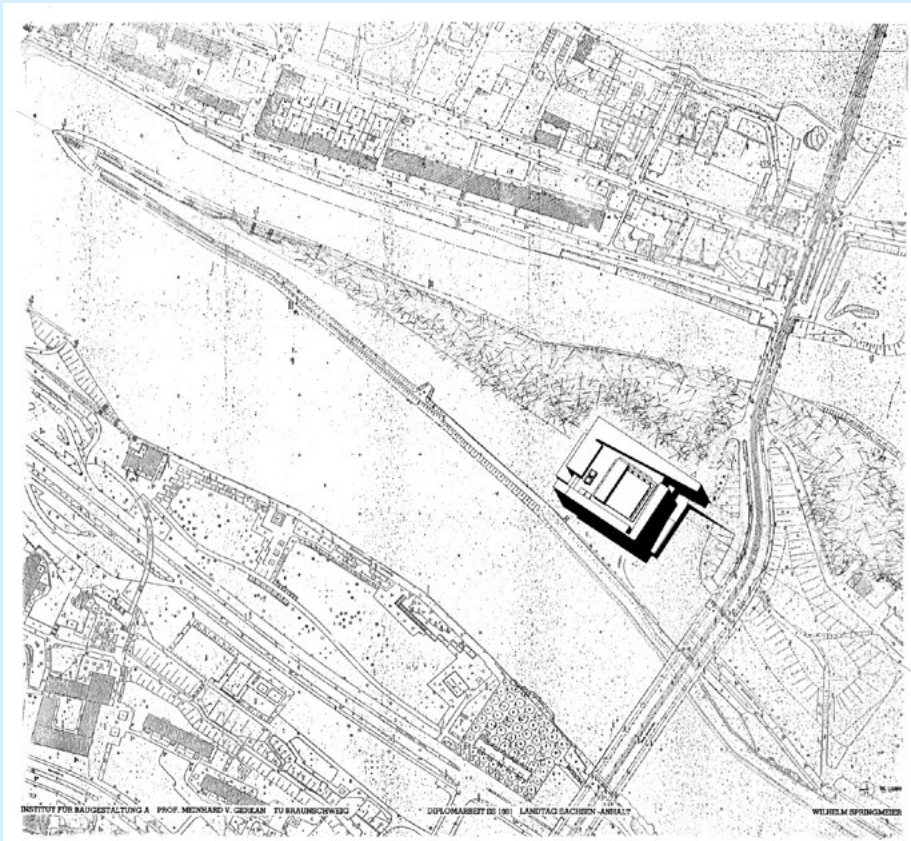


↑ Sabine Schilling, Variété, 1991, Wagner

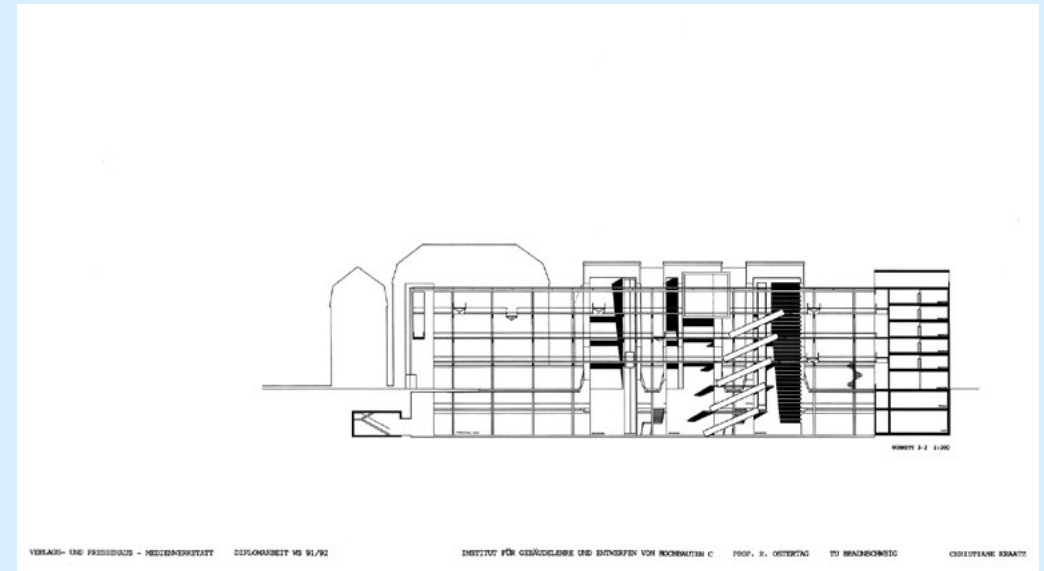
↓ Patrick Dierks, Landtag Sachsen-Anhalt (Saxony-Anhalt state parliament) in Magdeburg, 1991, von Gerkan



- ↑ Wilhelm Springmeier, Landtag Sachsen-Anhalt (Saxony-Anhalt state parliament) in Magdeburg, 1991, von Gerkan
- ↓ Tobias Amme, Sanatorium on Usedom, 1992, von Gerkan

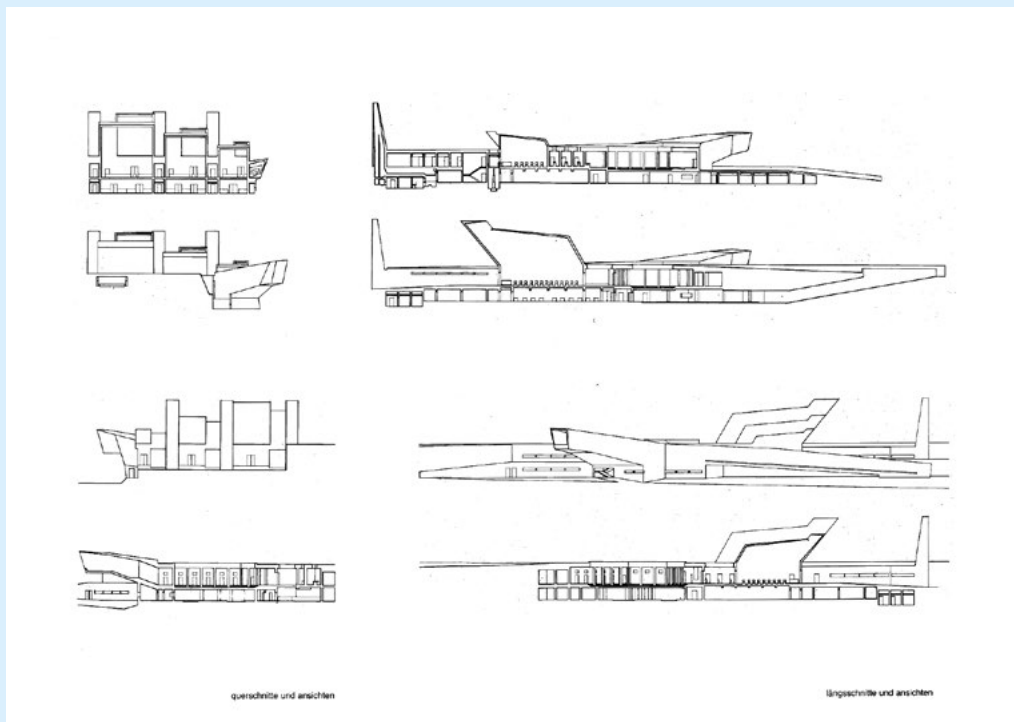
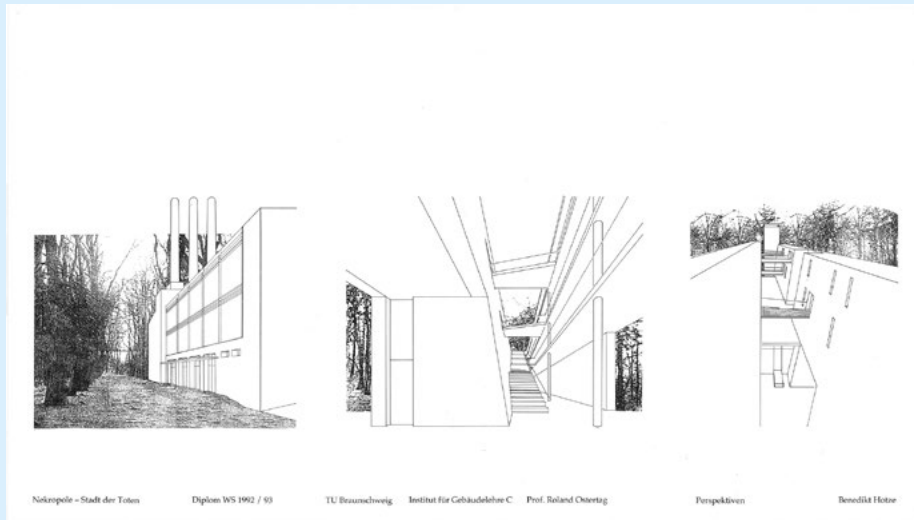


- ↑ Christiane Kraatz, Publishing and Press House. Media Workshop, 1992, Ostertag
- ↓ Sabine Mehrgardt, Brocken-Kopf (crown of the Brocken mountain), 1992, Auer



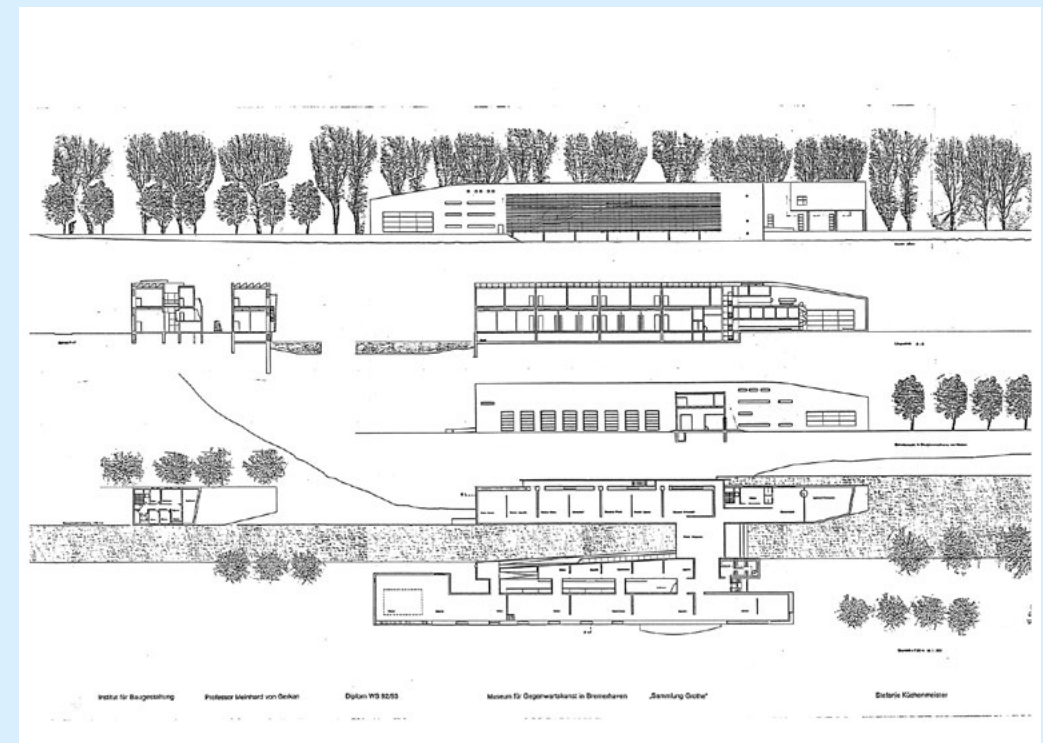
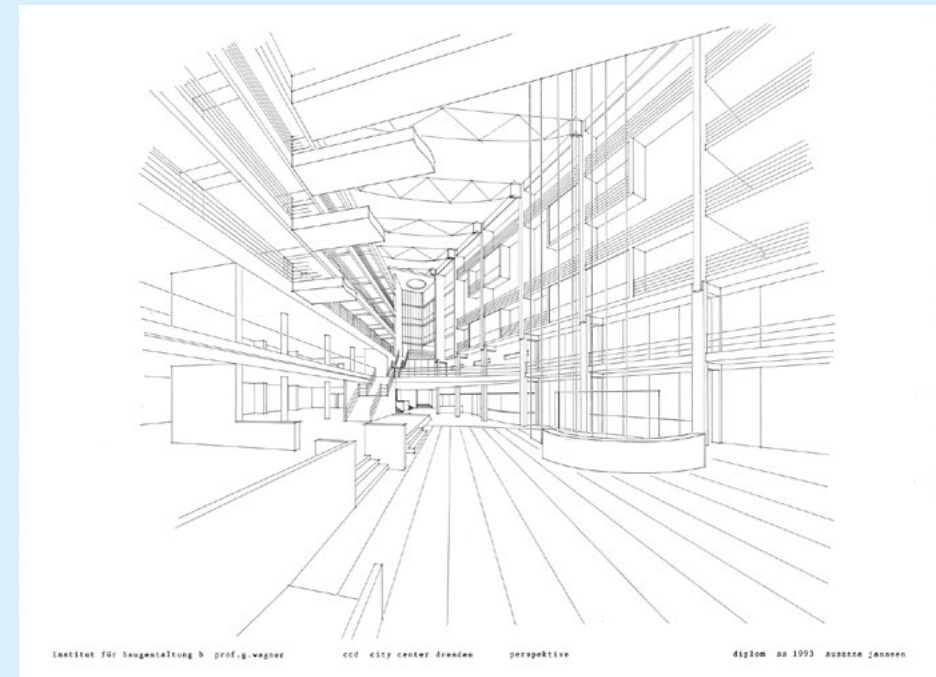
↑ Benedikt Hotze, Nekropole – Stadt der Toten (Necropolis – City of the Dead), 1993, Ostertag

↓ Imke Woelk, Nekropole – Stadt der Toten (Necropolis – City of the Dead), 1993, Ostertag



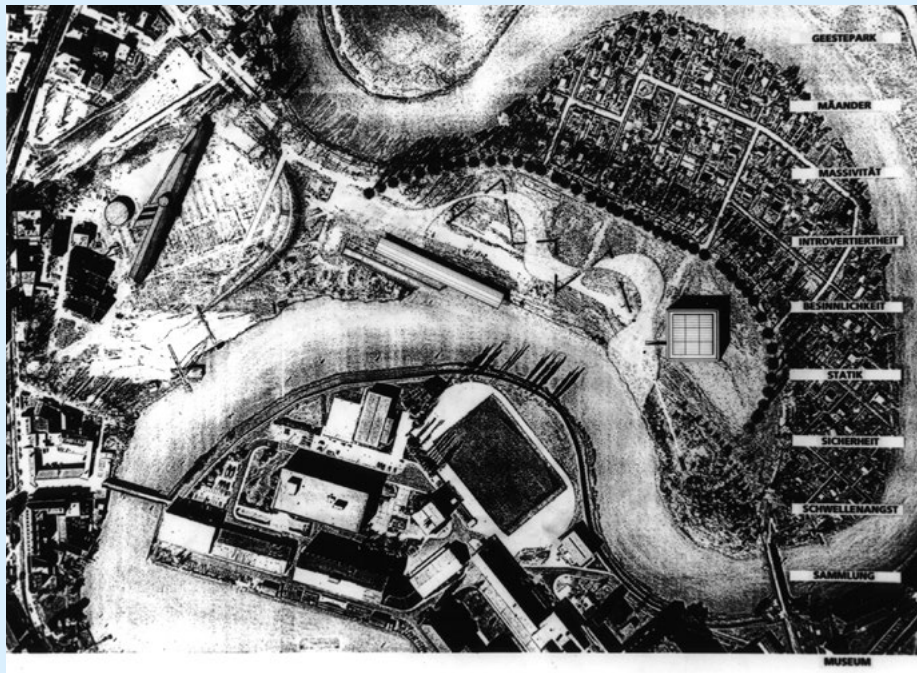
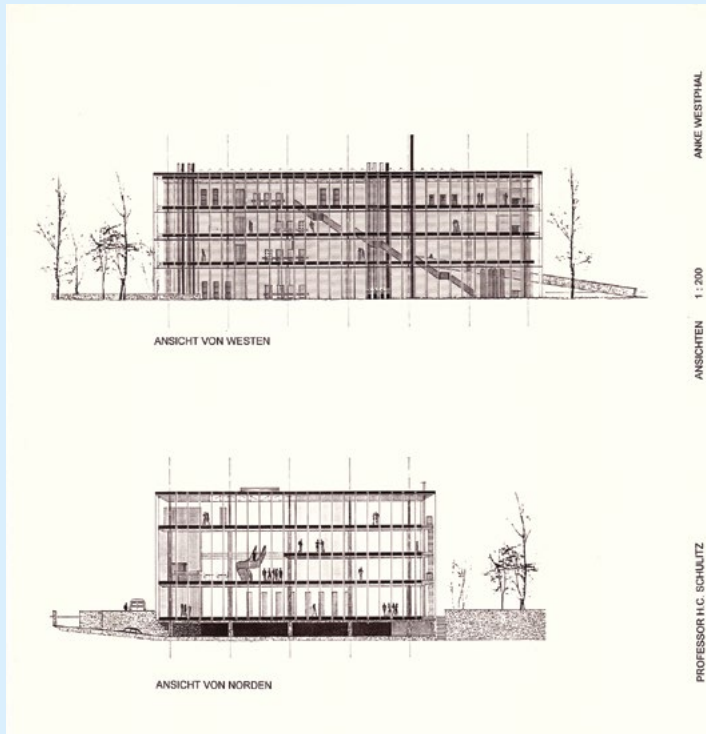
↑ Susanne Janssen (now Schütz), City Center Dresden, 1993, Wagner

↓ Stefanie Küchenmeister, Grothe Museum for Contemporary Art Collection in Bremerhaven, 1993, von Gerkan



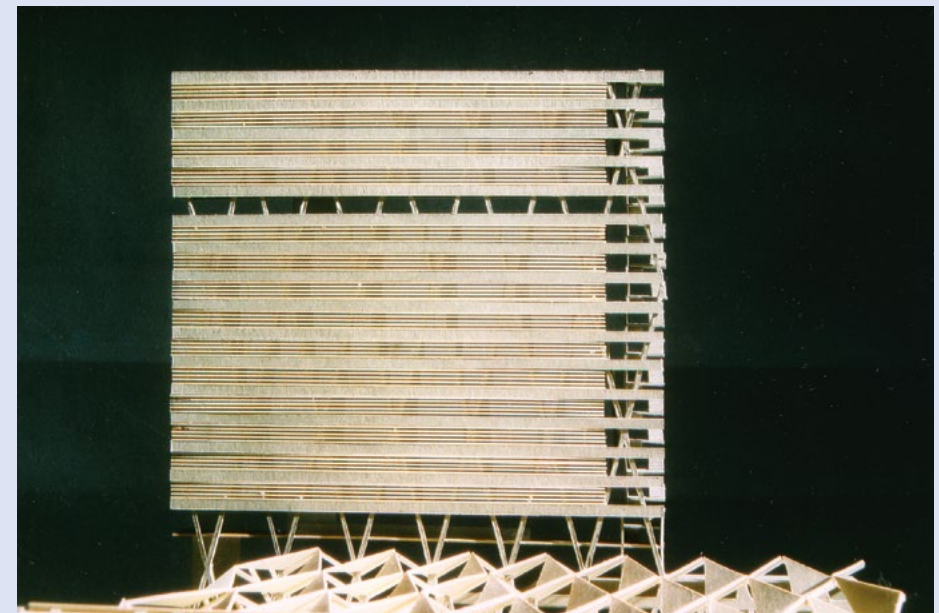
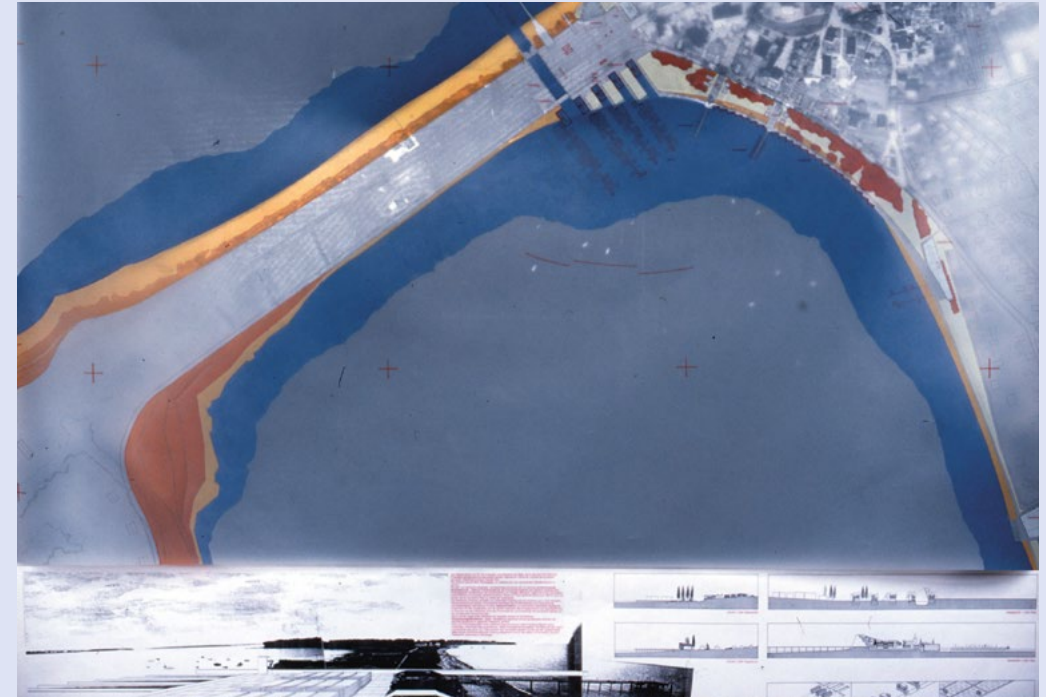
↑ Anke Westphal, Uhrenfabrik (clock factory) in Celle, 1993, Schultz

↓ Elmar Torinus, Grothe Museum for Contemporary Art Collection in Bremerhaven, 1993, von Gerkan

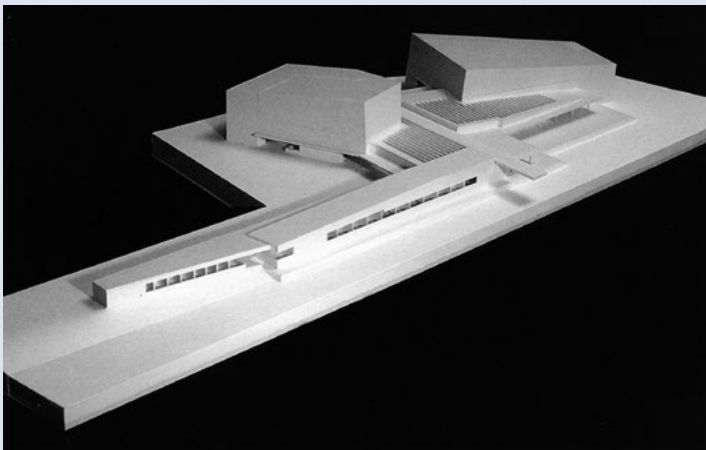
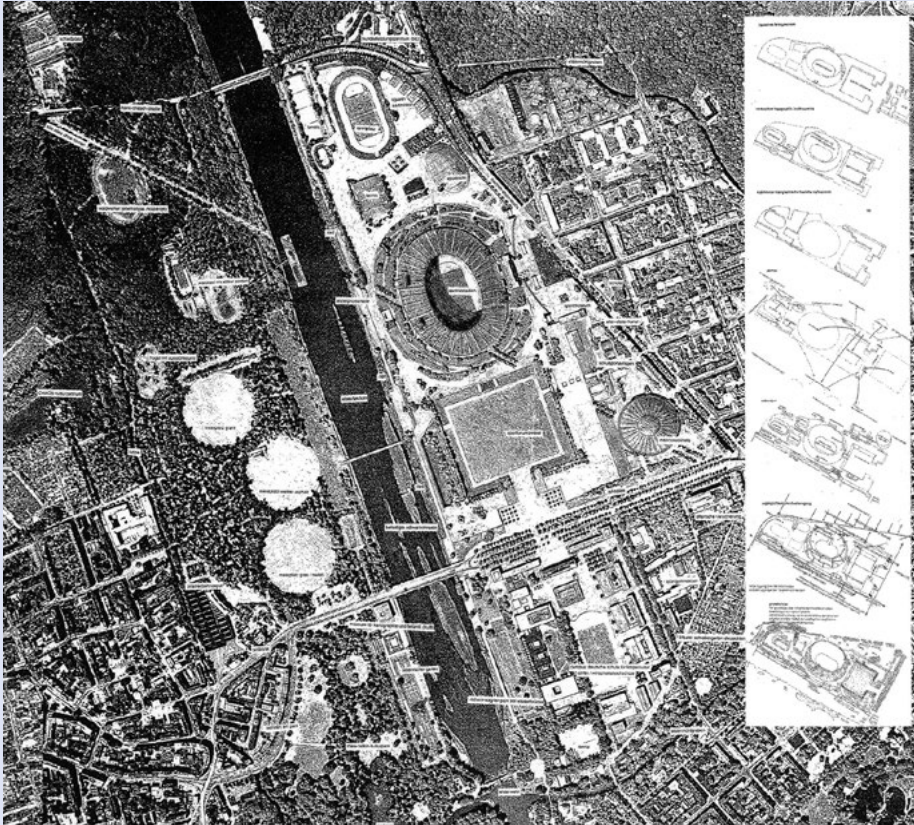


↑ Wolfram Putz, Rerik. Auferstanden aus Ruinen: Zwischen den Orten – die Unschärfe der Ränder (Rerik. Risen from ruins: in-between places – the blurring of the edges), 1995, Wehberg

↓ Julia Gill, Nordexpress, 1997, von Gerkan

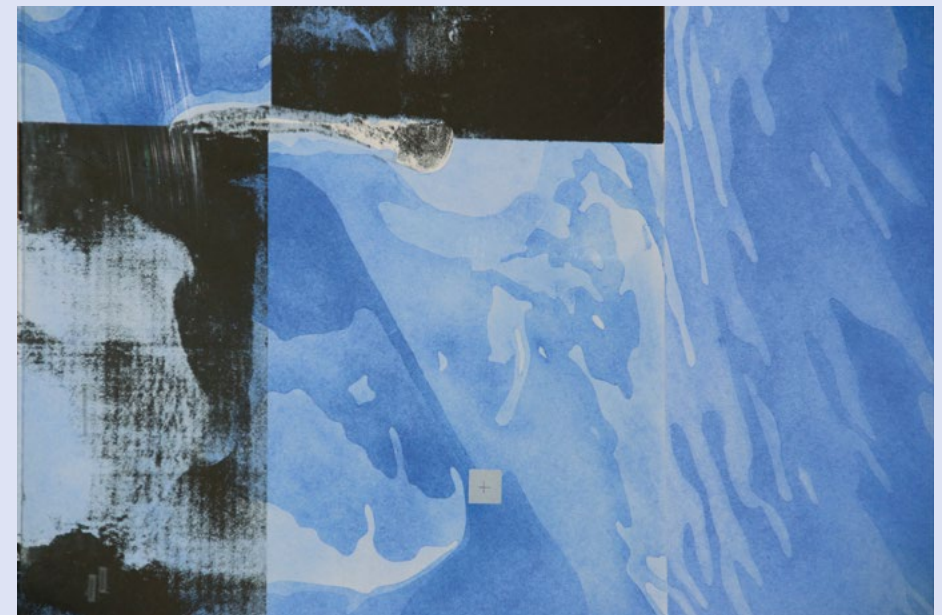
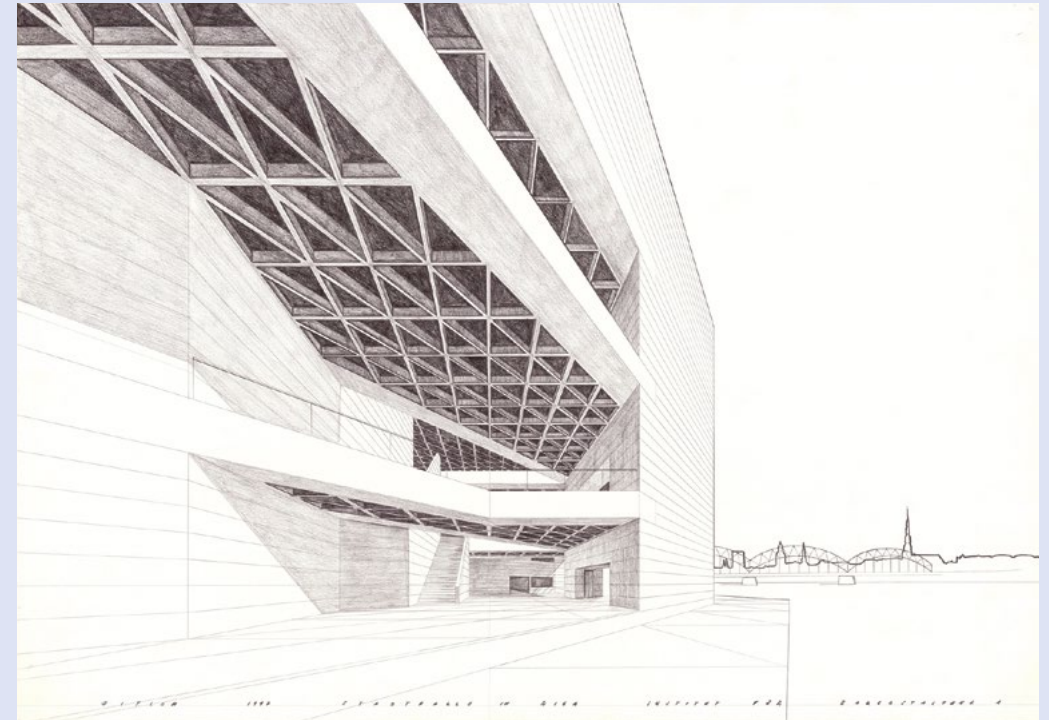


- ↑ Pierre Rey, Leipziger Allerlei (Leipzig Allsorts), 1997, G. Schuster
- ↓ Thomas Willemeit, Civic Center in Riga, 1997, von Gerkan



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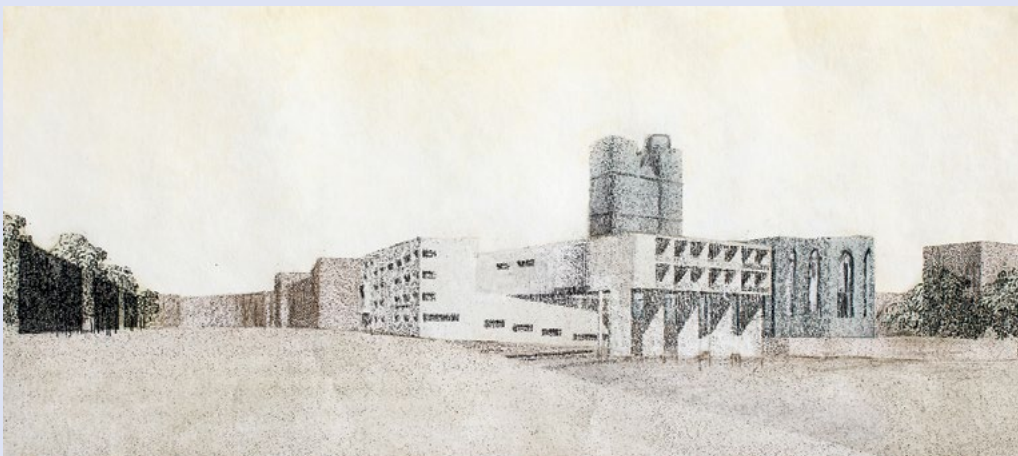
- ↑ Andreas Symietz, Civic Center in Riga, 1997, von Gerkan
- ↓ Astrid Bornheim, Denkmal Landschaft (monument landscape) Peenemünde, 1998, Wehberg



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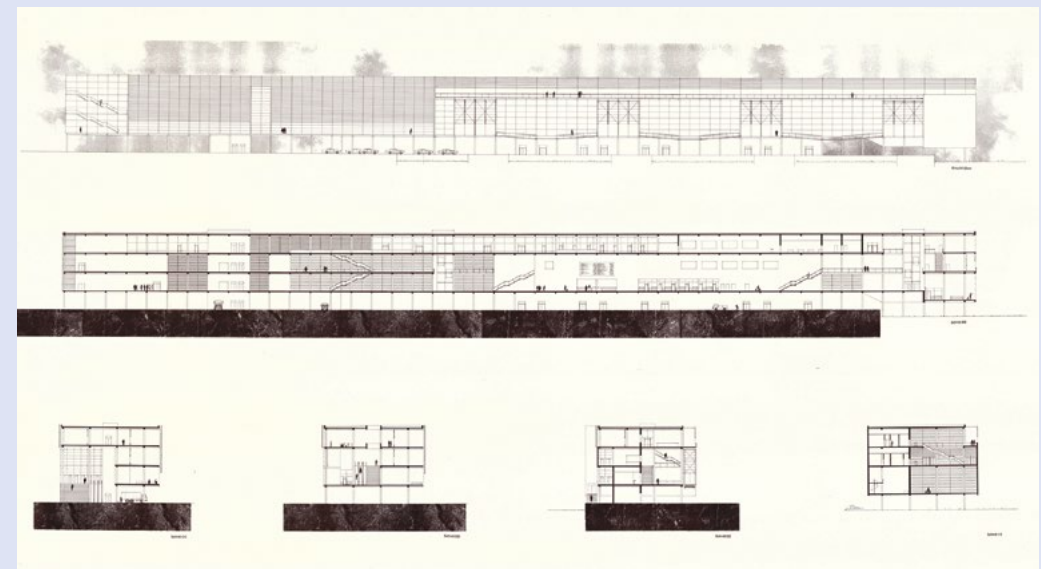
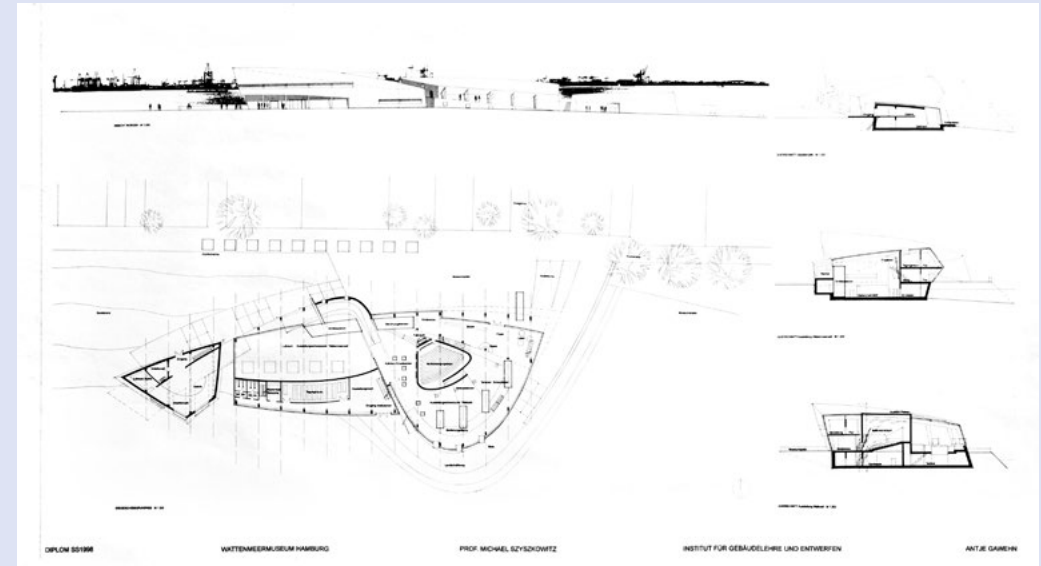
1997, 1998

- ↑ Uta-Janina Graff, Sultanate of Oman Embassy, 1998, von Gerkan
- ↓ Nicolas Pområnke, Dominican Monastery in Magdeburg, 1998, Wagner



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- ↑ Antje Gawehn, Wattenmeer-museum (wadden sea museum) Hamburg, 1998, Szyszkowitz
- ↓ Karen Brand, Manhattan Transfer, 1999, Schulitz

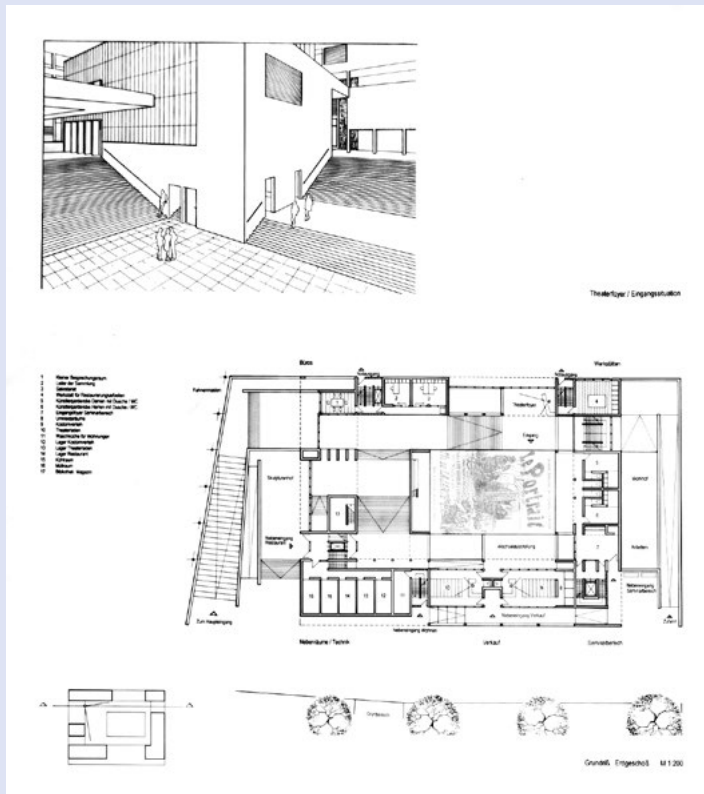


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1998, 1999

Simon Paulus, Kulturforum Graz,
1999, Szyszkowitz

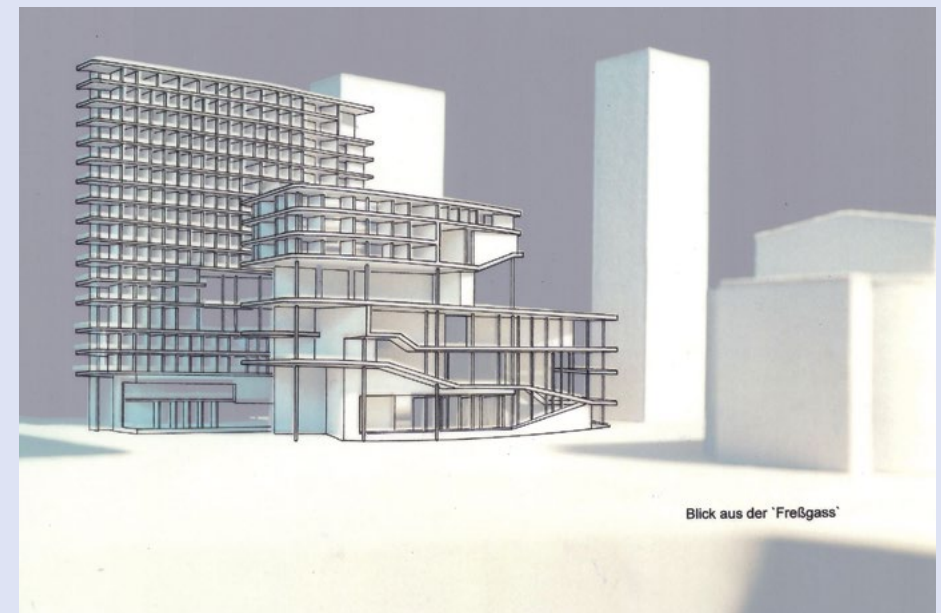
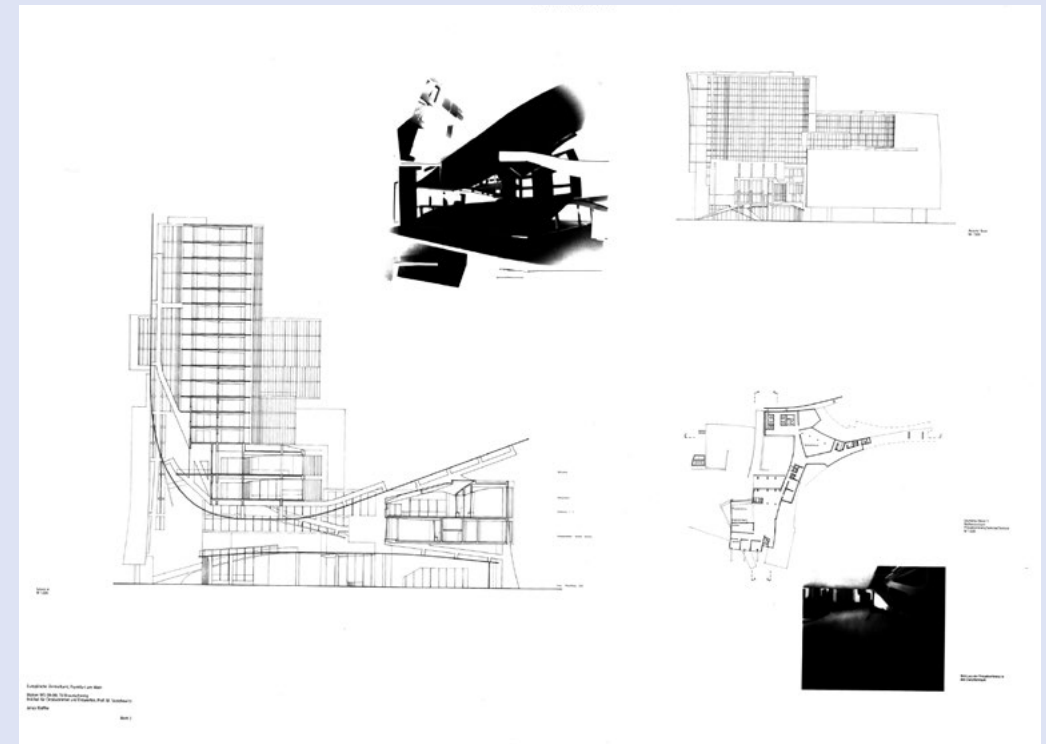
Nicole Schneider (now Froberg),
Theatralia... Köln, 1999, Wagner



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Julius Klaffke, European Central
Bank in Frankfurt am Main, 2000,
Szyszkowitz

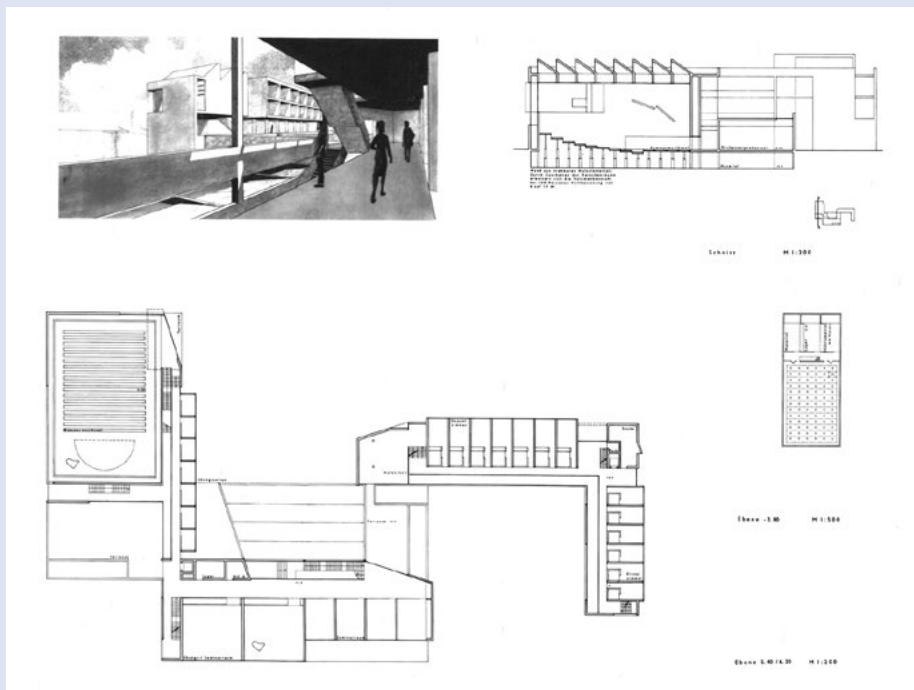
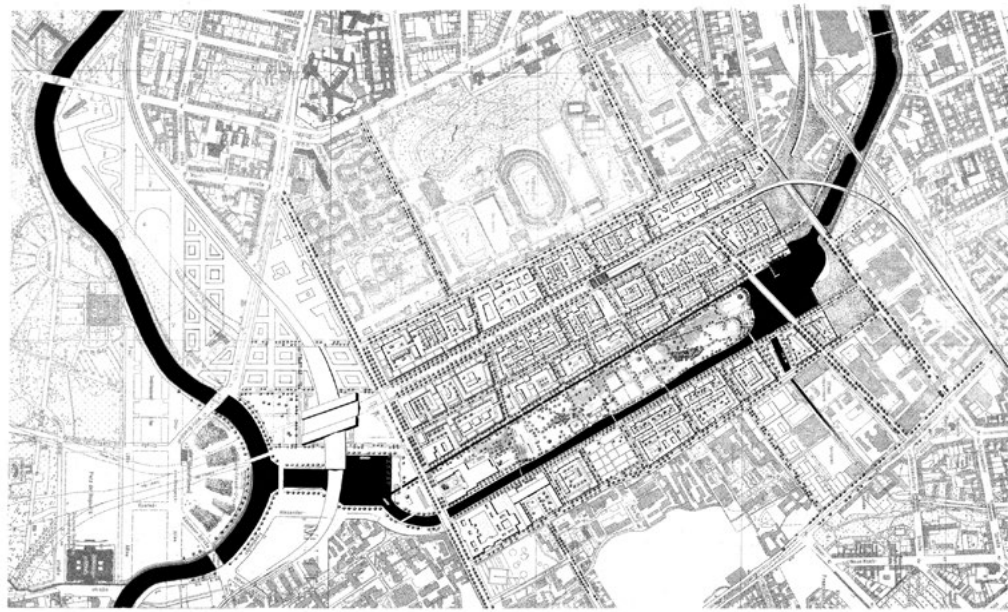
Lillianne Kuhn, European Central
Bank in Frankfurt am Main, 2000,
Szyszkowitz



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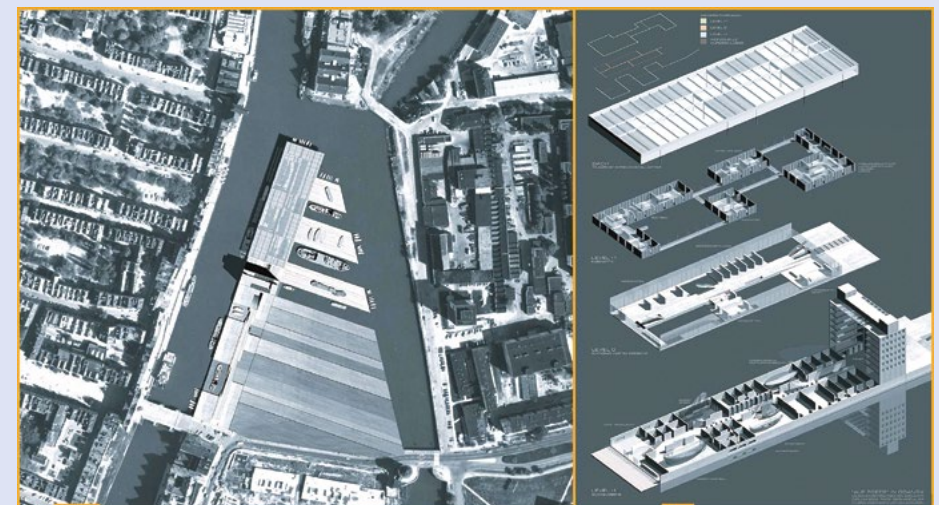
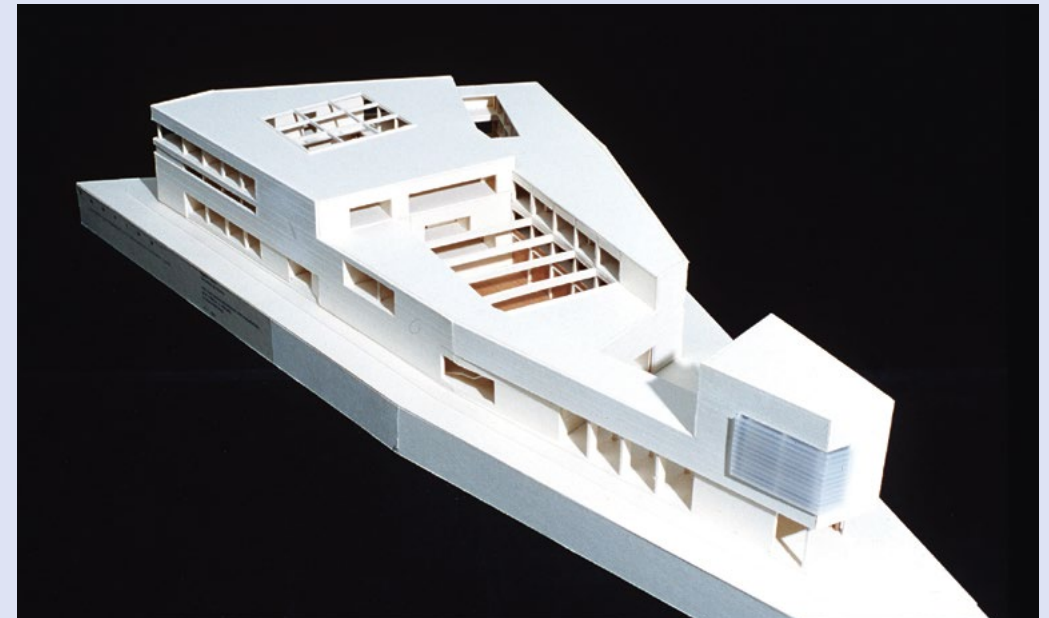
1999, 2000

- ↑ Sandi Morese, In-Site Berlin.
Life at the Lehrter Bahnhof,
2000, Ackers
- ↓ Robert Friedrichs, Collegium
Musicum, 2001, von Gerkan



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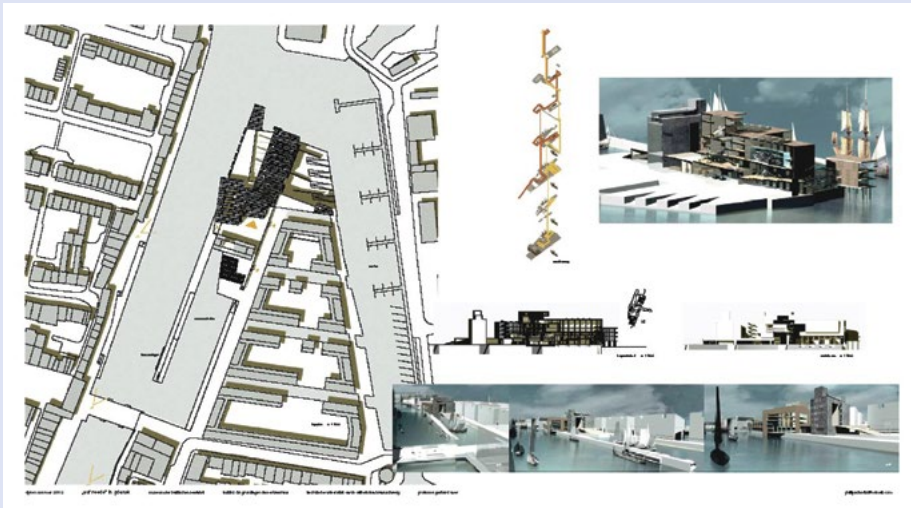
- ↑ Cornelius Strübing, Fabrica. Center
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- ↓ Jan Holzhausen, Auf Reede in
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of Baltic Seafaring, 2002, Auer



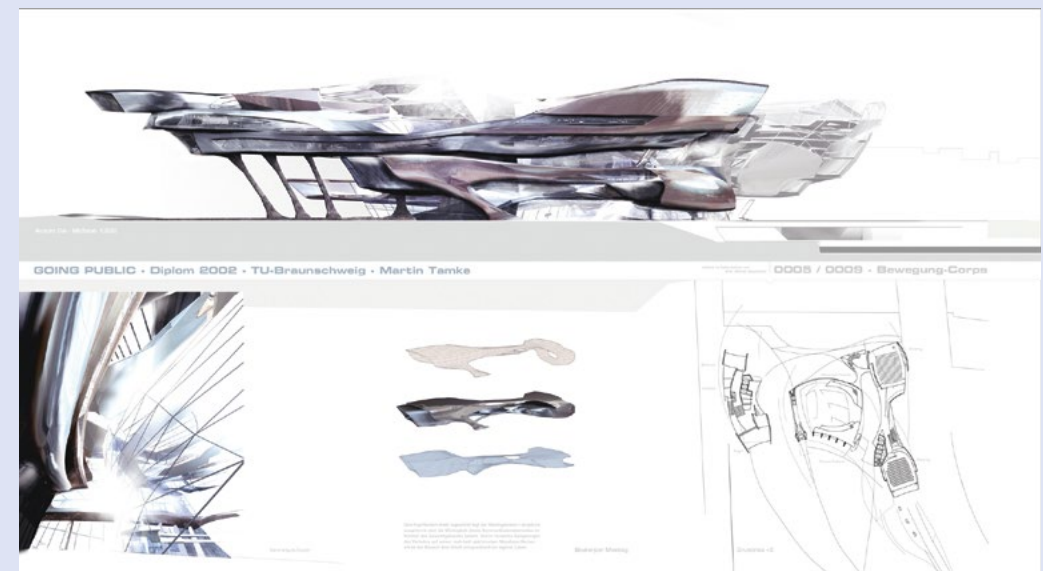
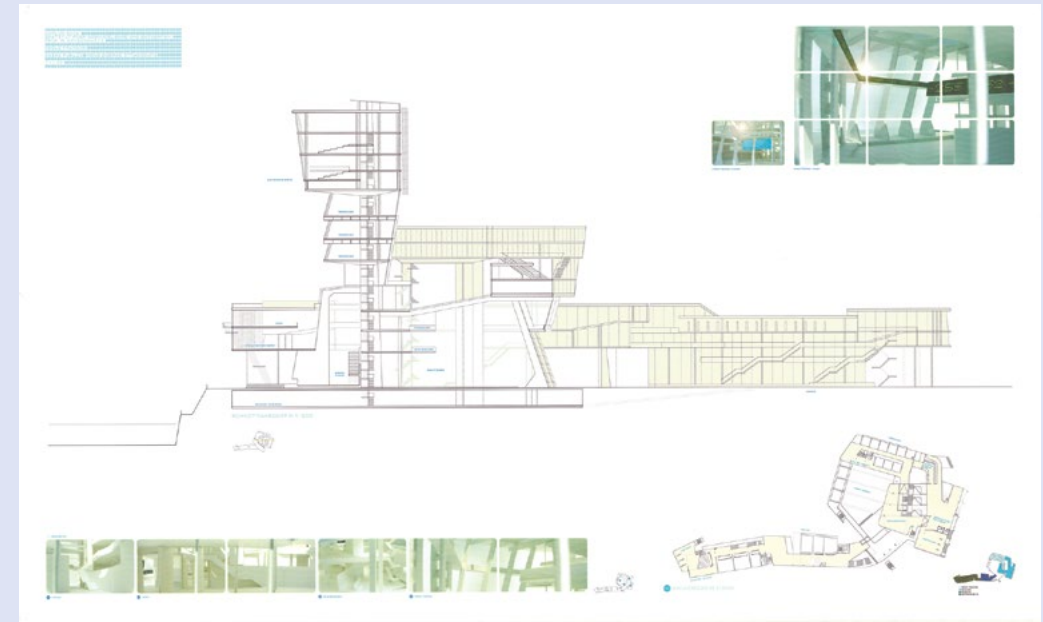
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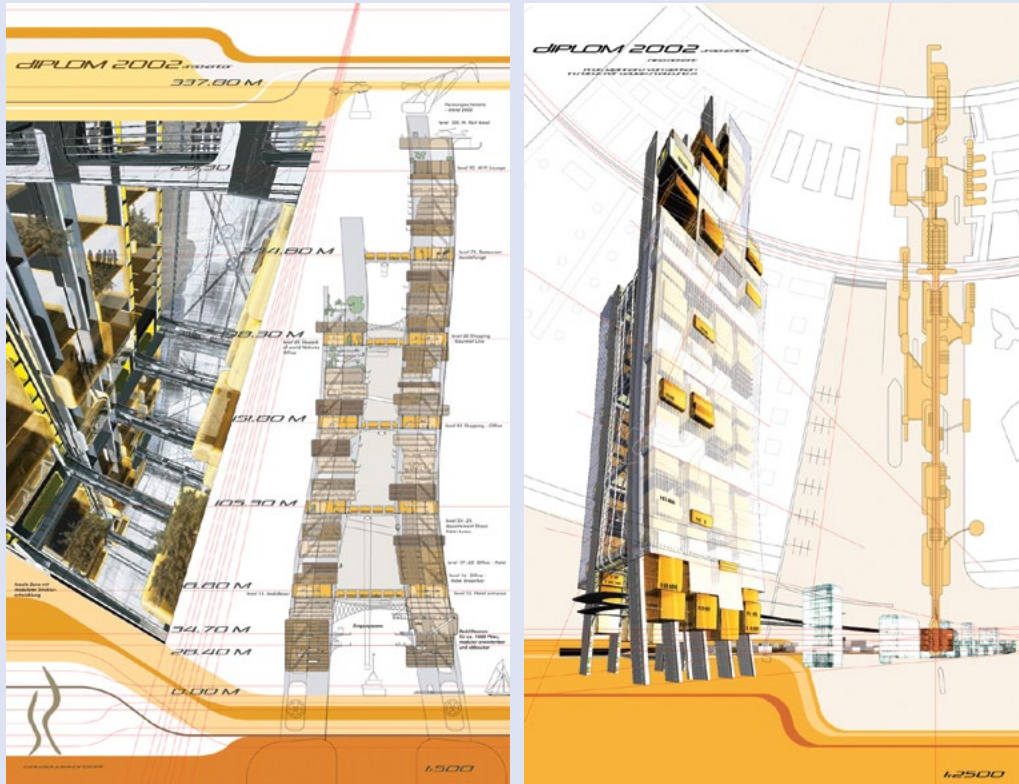
- ⬆ Phillip Schmitz, Auf Reede in Gdansk (at sea in Gdansk). Museum of Baltic Seafaring, 2002, Auer
- ⬇ Sandra Pechmann (now Morese), Spezialmischung. Der neue Holzhafen in Wismar (Special blend. The new Holzhafen in Wismar), 2002, Ackers



- ⬆ Adele Pramann (now Heisecke), Going Public. Neue Börse (New Stock Exchange) Strasbourg, 2002, Szyszkowitz
- ⬇ Martin Tamke, Going Public. Neue Börse (New Stock Exchange) Strasbourg, 2002, Szyszkowitz



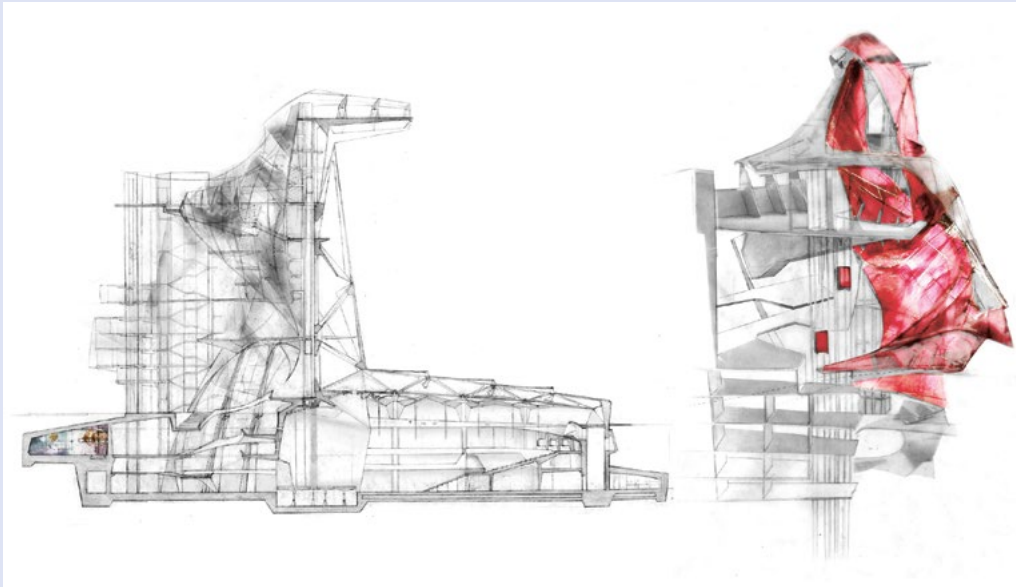
- ↑ Frank-Nikolaus Rickert, Drachentor (dragon gate), 2002, von Gerkan
- ↓ Oliver Sohn, Educity: University for the 21st Century, 2002, Brederlau



- ↑ Heike Witt, Drachentor (dragon gate), 2002, von Gerkan
- ↓ Arno Hoffmann, Ultime Dimore. Krematorium, 2003, Roth

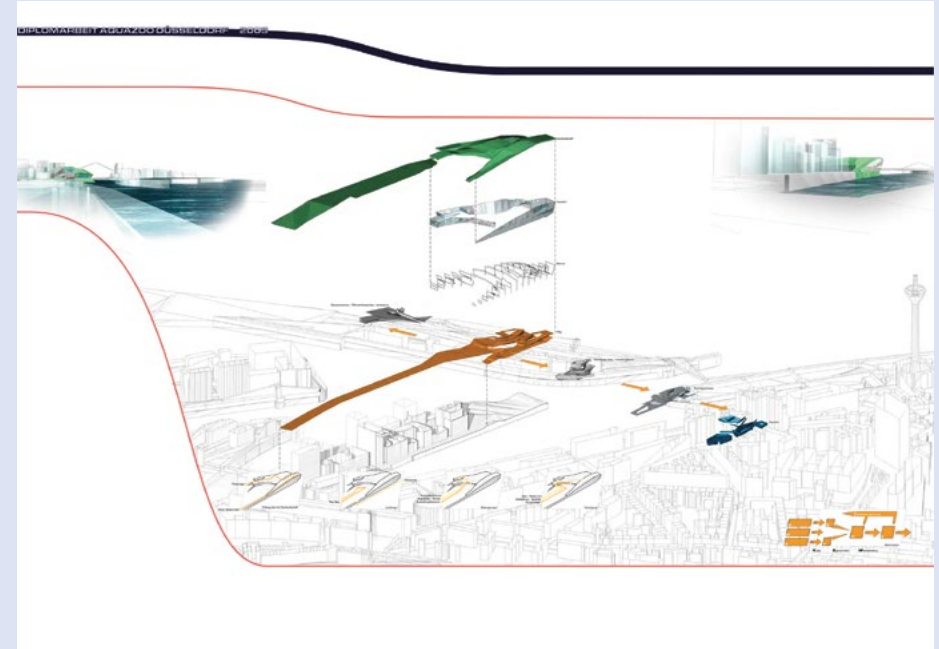


- ↑ Oxana Krause, Magiczny Plac –
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- ↓ Annette Schwarte, SITE – Ein ex-
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- ↑ Sven Fuchs, Aquazoo, 2004,
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- ↓ Sebastian Hoyer, Ozeanarium
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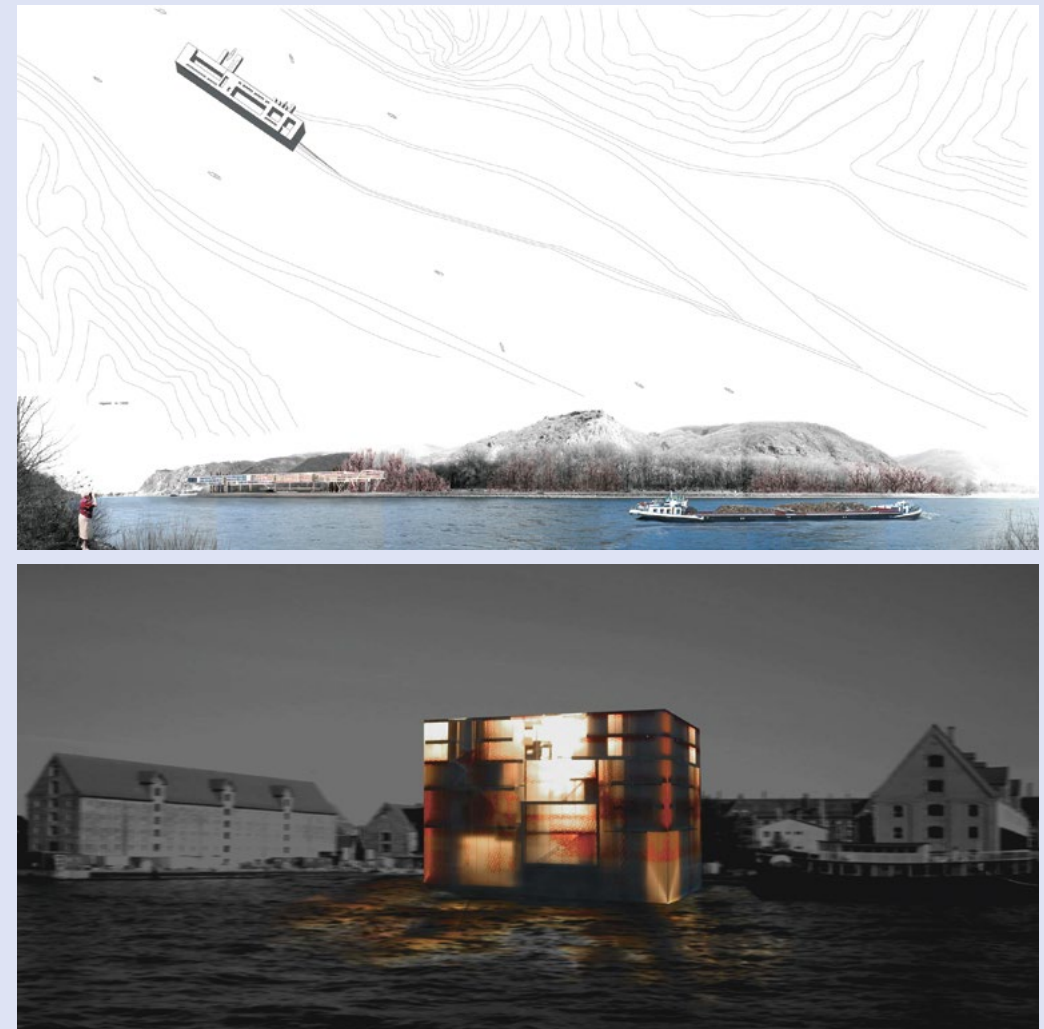
↓ Silke Lubahn, Rotterdam Waterfront Living, 2004, Brederlau



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↑ Torsten Klöppelt, UN-College Insel Hammerstein, 2004, R. Schuster

↓ Leonore Voland, Embassy of the Baltic States in Copenhagen, 2004, Wagner

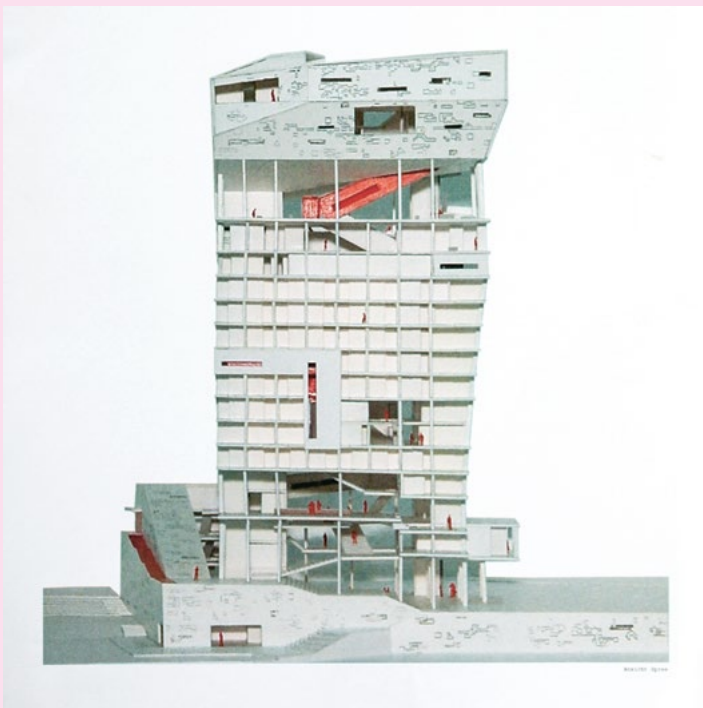
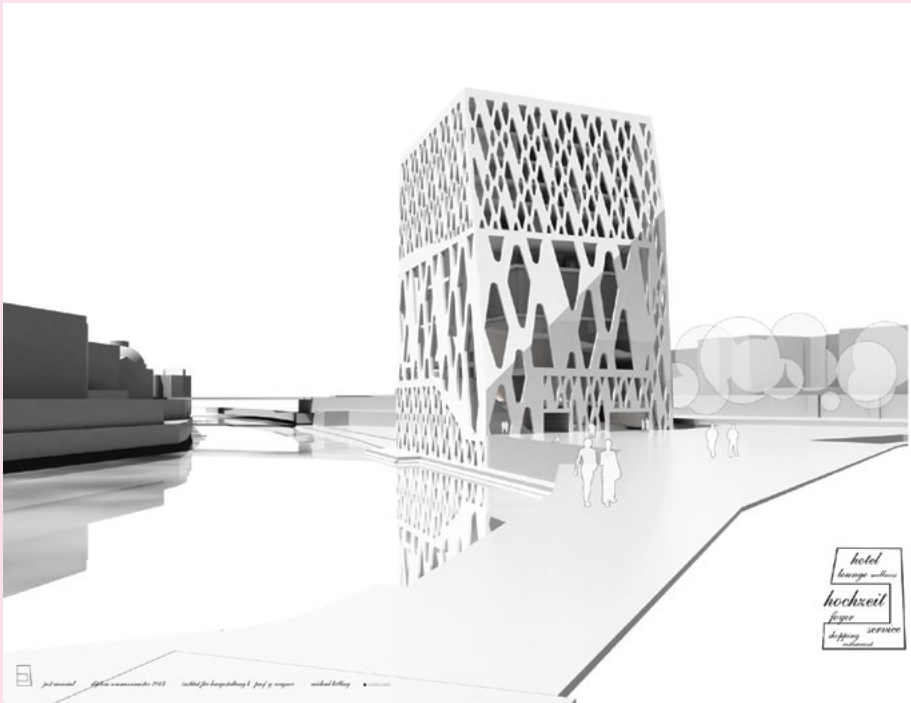


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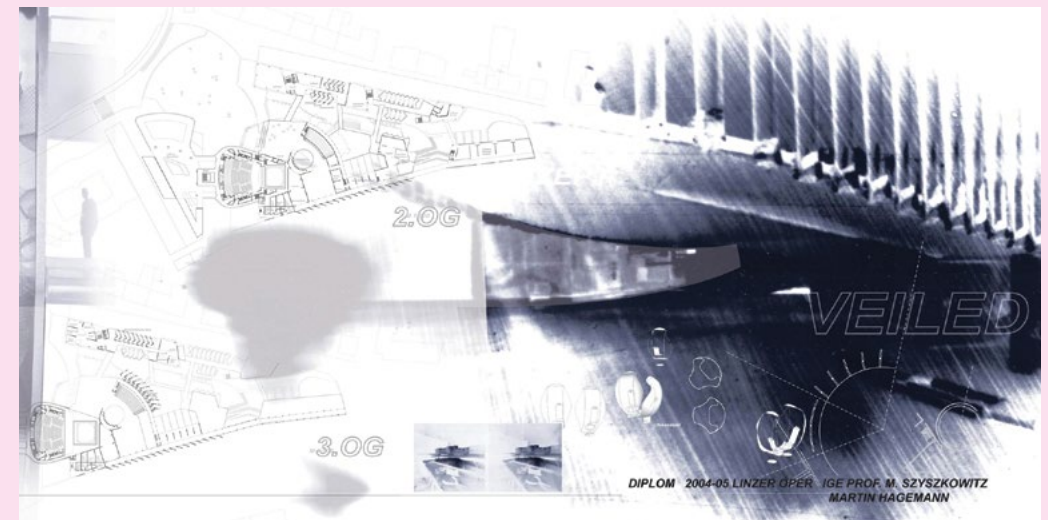
↑ Michael Bölling, Just married.
Hochzeitshaus (house for
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↓ Gunnar Schulz, Just married.
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↑ Martin Hagemann, Linz Opera
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↓ Florian Holik, Leben und Arbeiten
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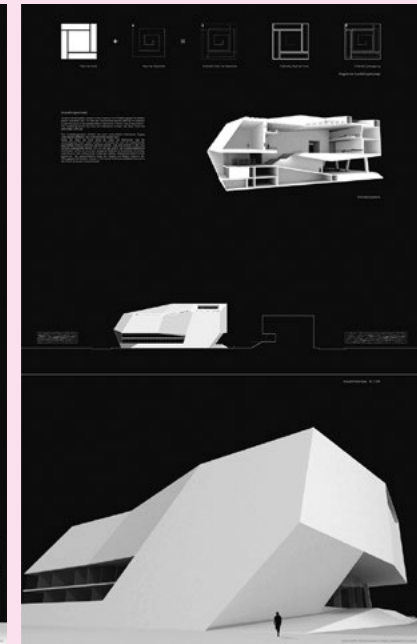
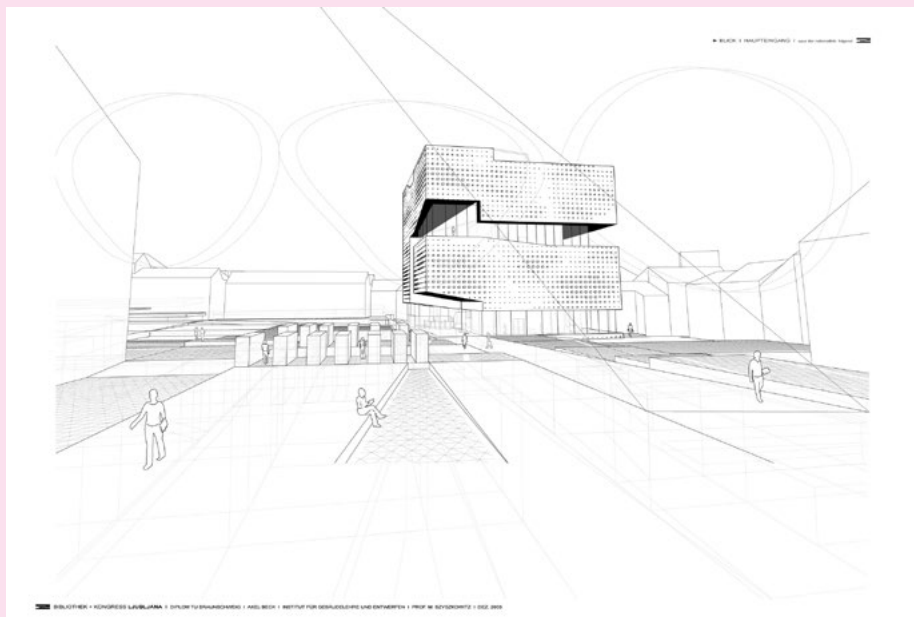
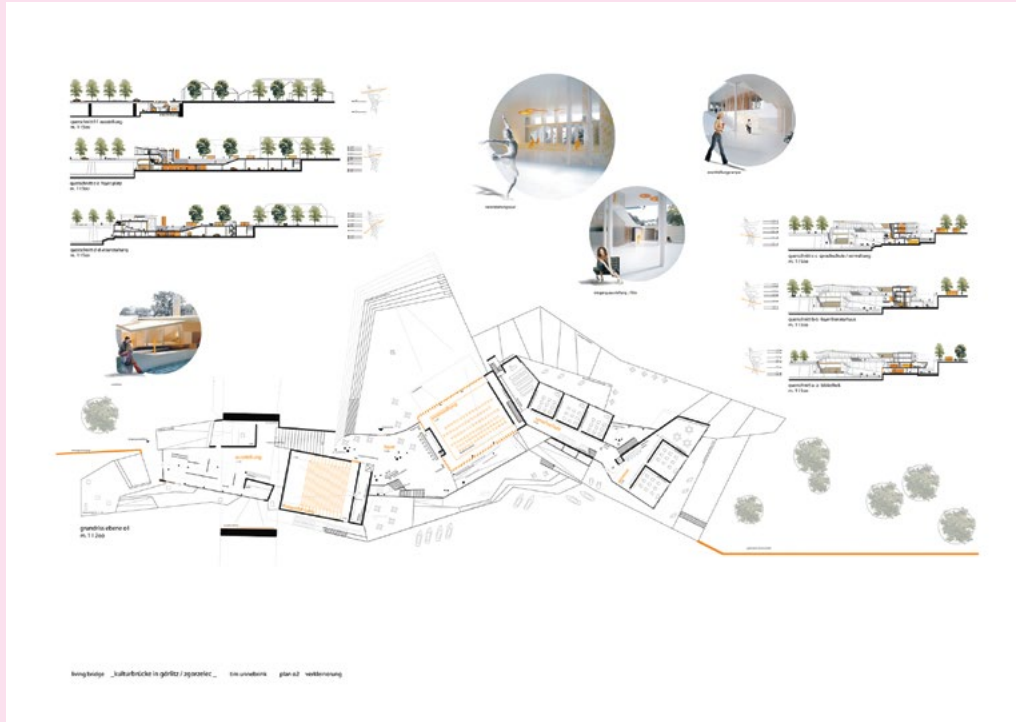


↑ Tim Unnebrink, Living Bridge:
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↓ Axel Beck, Quartier des Wissens.
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↑ Sebastian Brunke, Budapest Revo-
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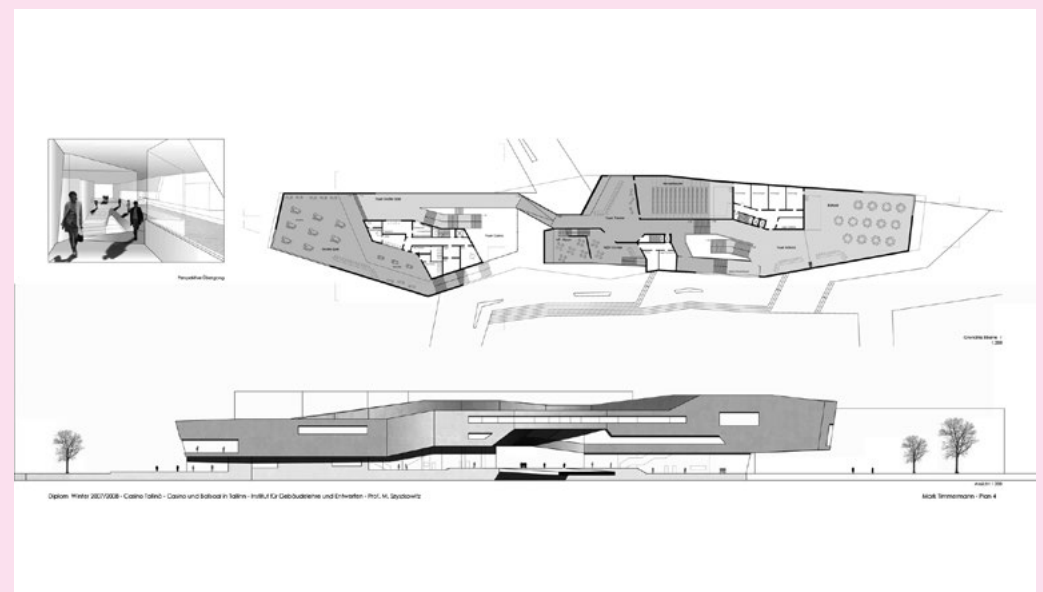
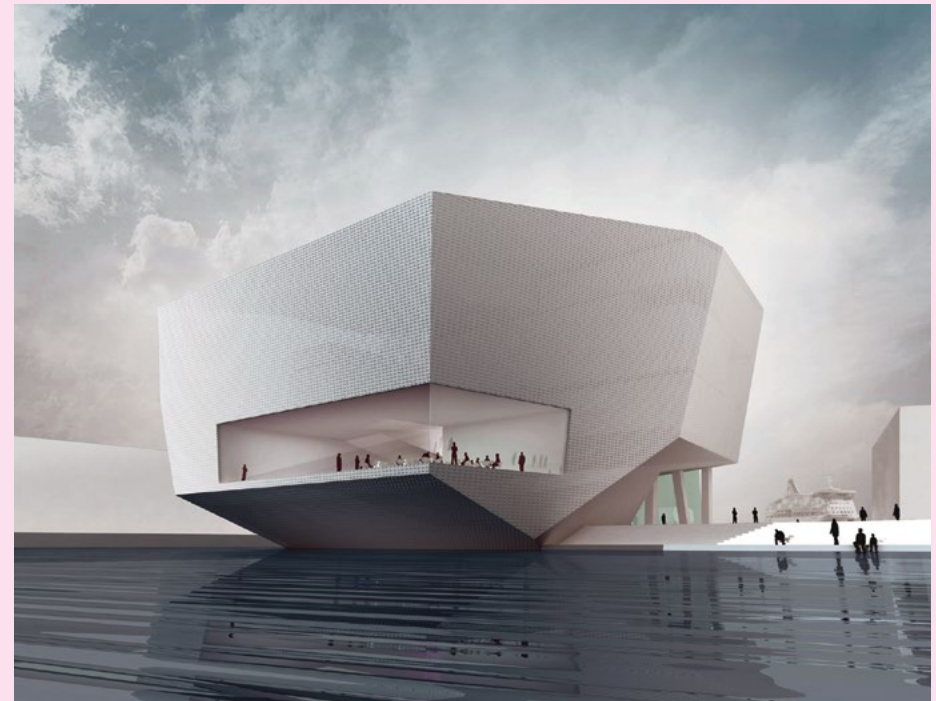
↓ Frederik Siekmann, Sportscape,
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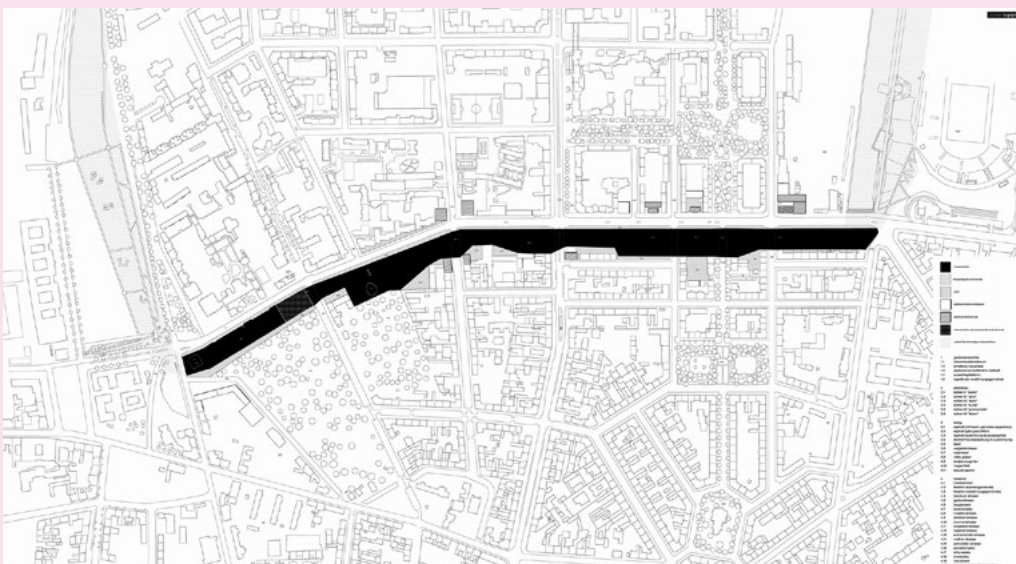
- ⬆ Alexander Butz, FilmKultur Forum
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- ⬇ Marc-Aurel Jensen, Vertical
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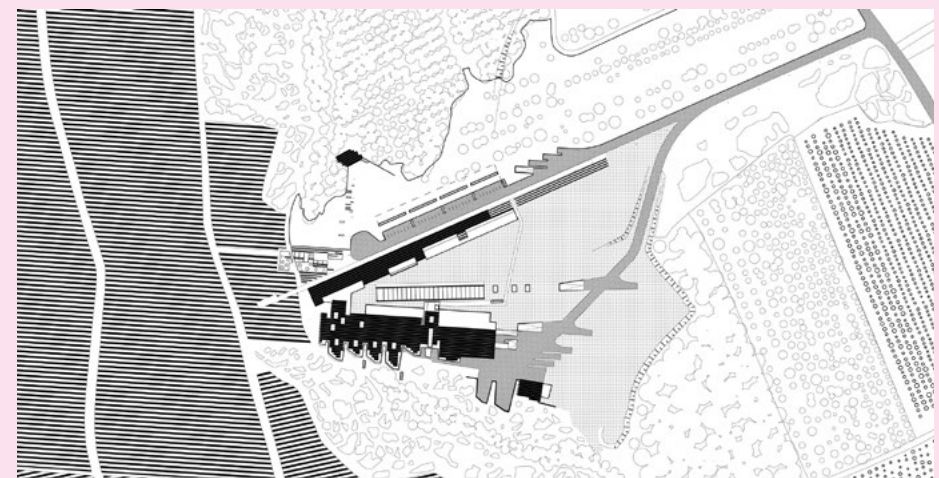
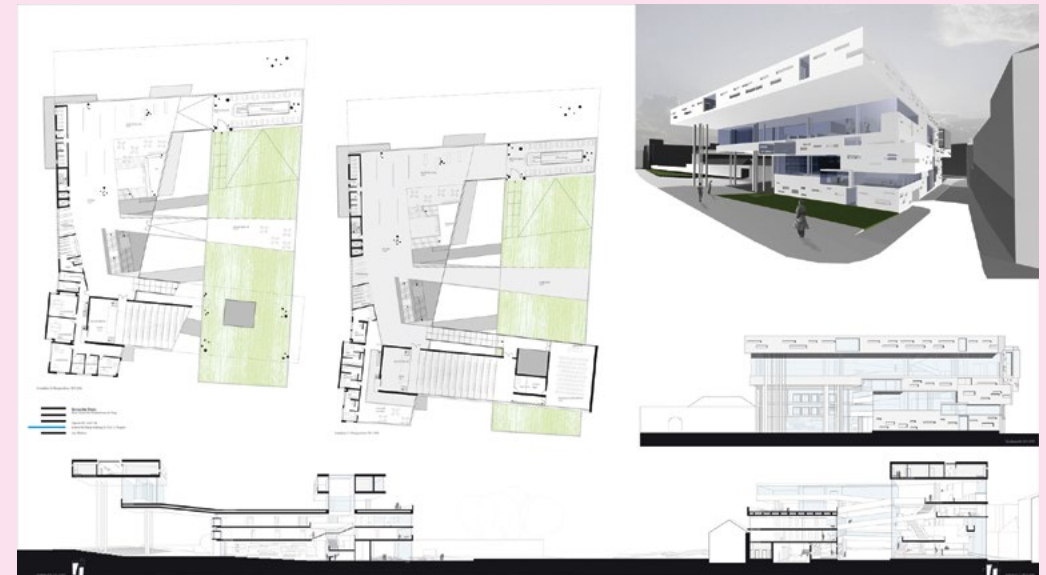
- ⬆ Benjamin Bühs, Tallino – Casino
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- ⬇ Mark Timmermann, Tallino –
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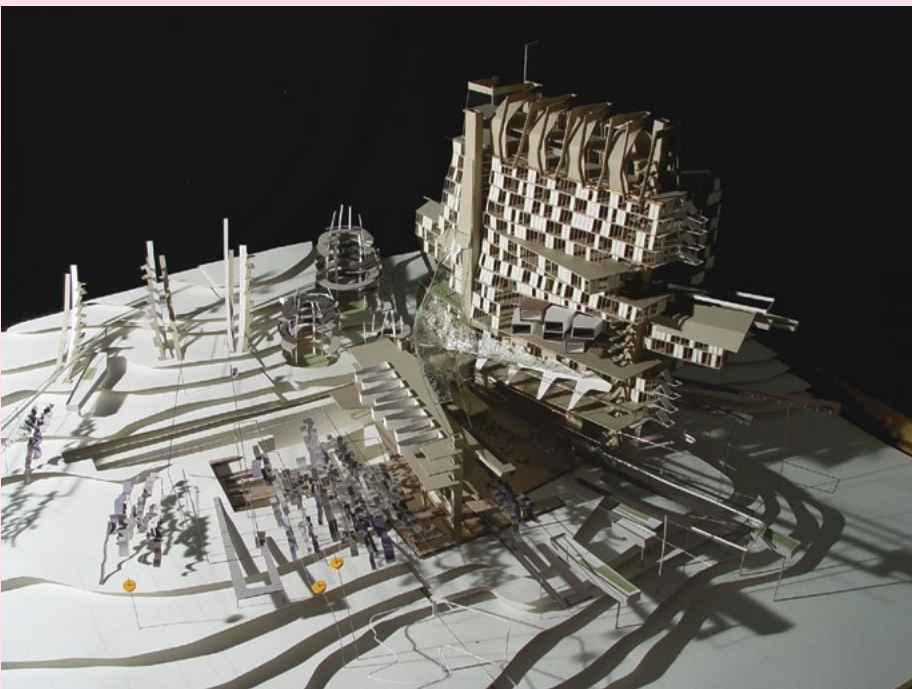
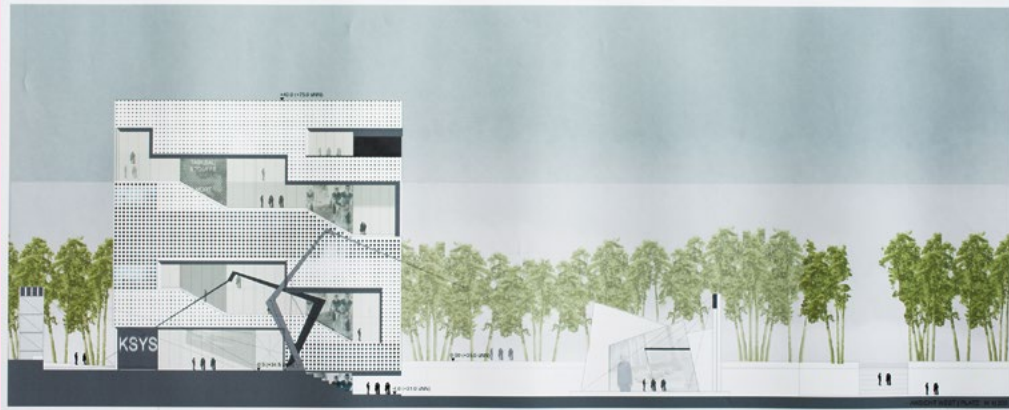
- ↑ Olaf Härtel, Ruhr. City. Lab, 2008, R. Schuster
- ↓ Carolin Kleist, Gedenkstätte Berliner Mauer (Berlin Wall Memorial), 2008, Kiefer



- ↑ Lisa Nielsen (now Nielsen-Hagemann), Nemecký dum Praha – House of German Public Institutions in Prague, 2008, Wagner
- ↓ Jan Pingel, Weingut (vineyard) Frank & Frei, 2008, Roth

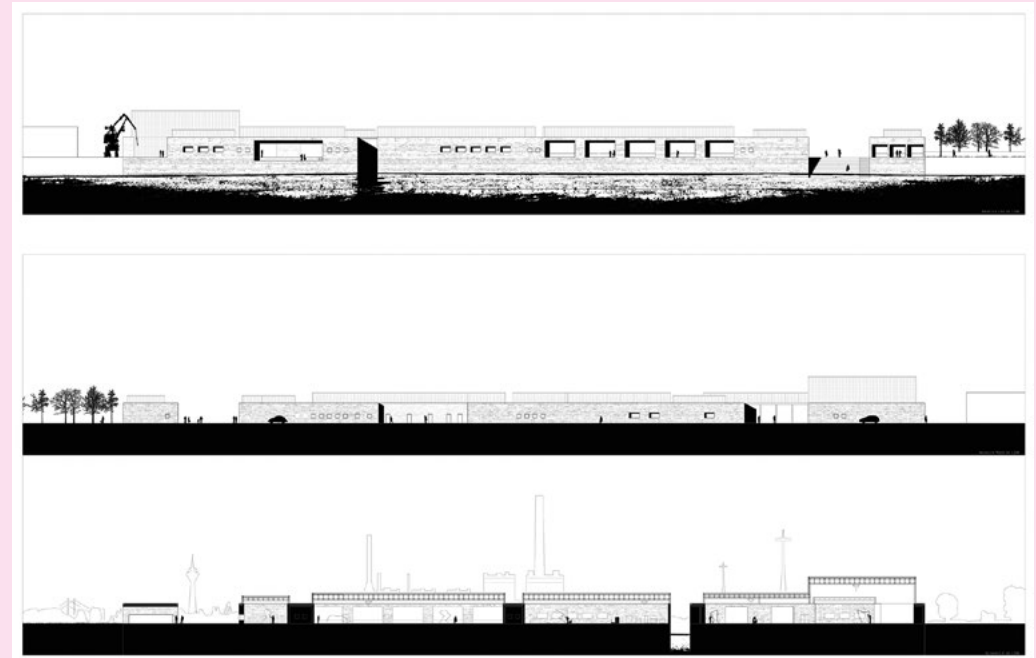


- ↑ Arnd-Andreas Vickers, Musenkuss. Station für ermöglichte Kunst (Kiss of the Muses. Station for enabled art) in Berlin, 2008, Wagner
- ↓ Julian Busch, Aerotopos 2018. Center for the Innsbruck Winter Games, 2009, Szyszkowitz



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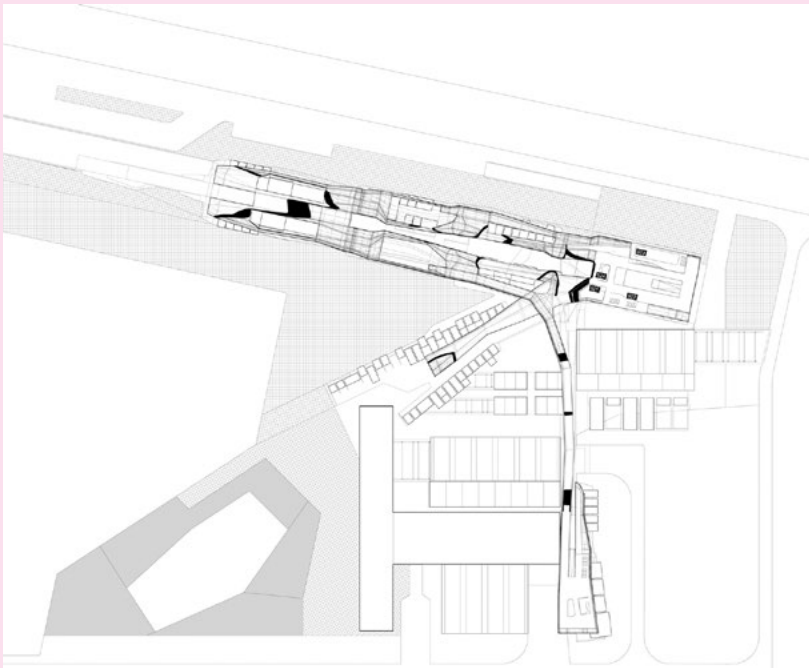
- ↑ Linda Höfs (now Gehrke), Atelier- und Gießereiwerkstätten (studio and foundry workshops) in Düsseldorf, 2009, Roth
- ↓ Fahim Mohammadi, Nahtstelle Berlin (suture/interface Berlin), 2009, Penkhues



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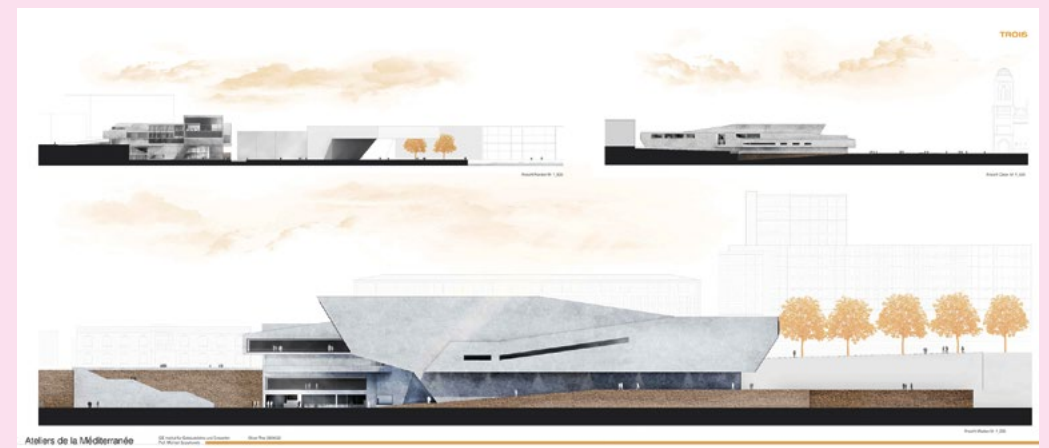
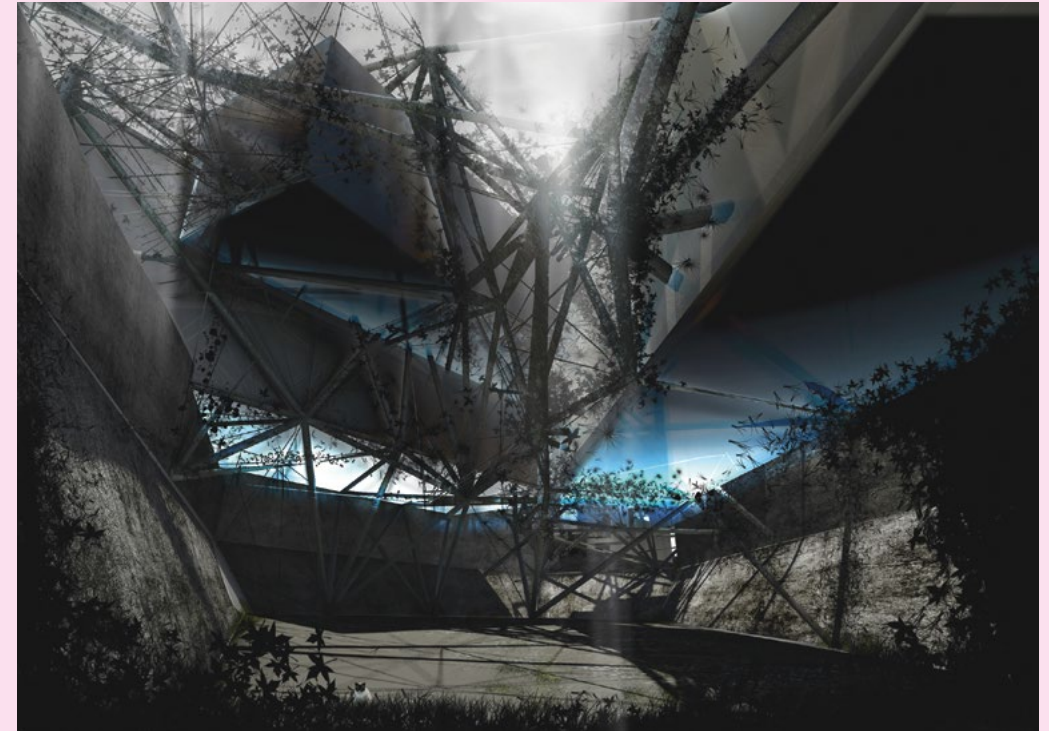
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- ↑ Simon Hartenberger, Tacet.
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- ↓ Sebastian Kaus, esec –
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- ↑ Markus Willeke, Gebrüder Grimm
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- ↓ Oliver Thar, Ateliers de la
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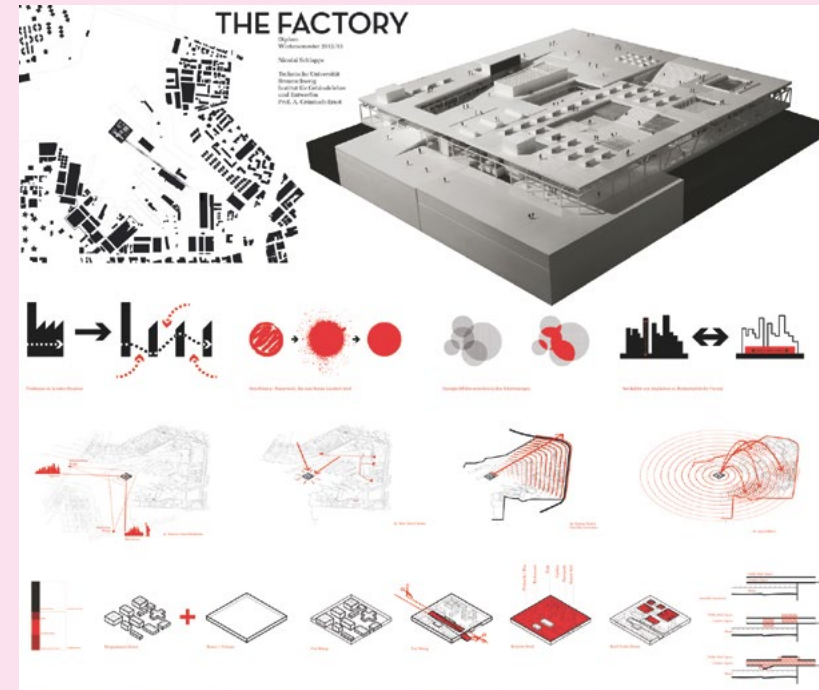
↑ Simon Banakar, Deutsches Tapetenmuseum (German Wallpaper Museum) Kassel, 2013, Penkhues



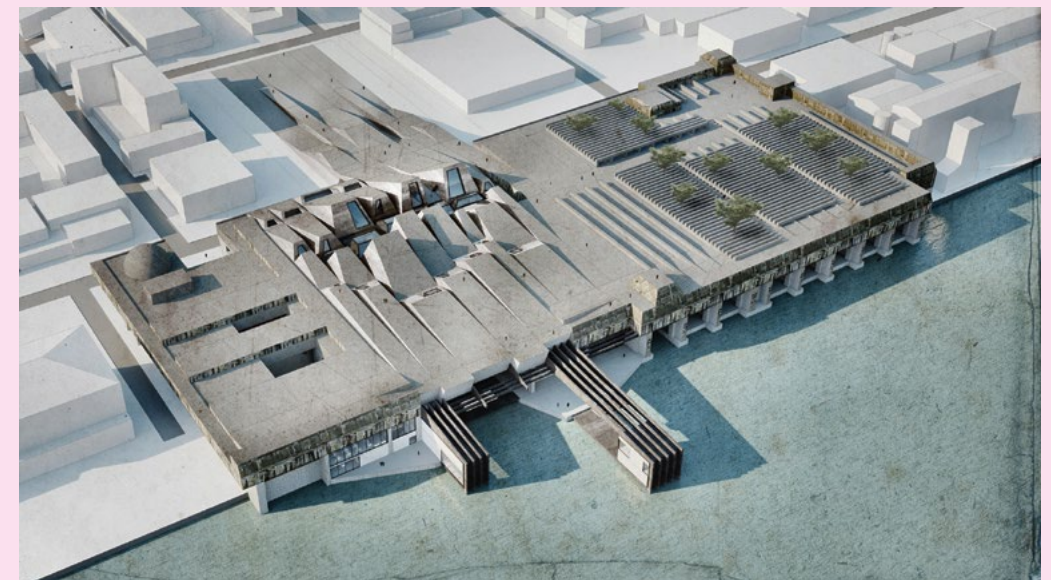
↓ Fabian Busse, Brookly Navy Yards. Urban Sprout, 2013, Grüntuch-Ernst



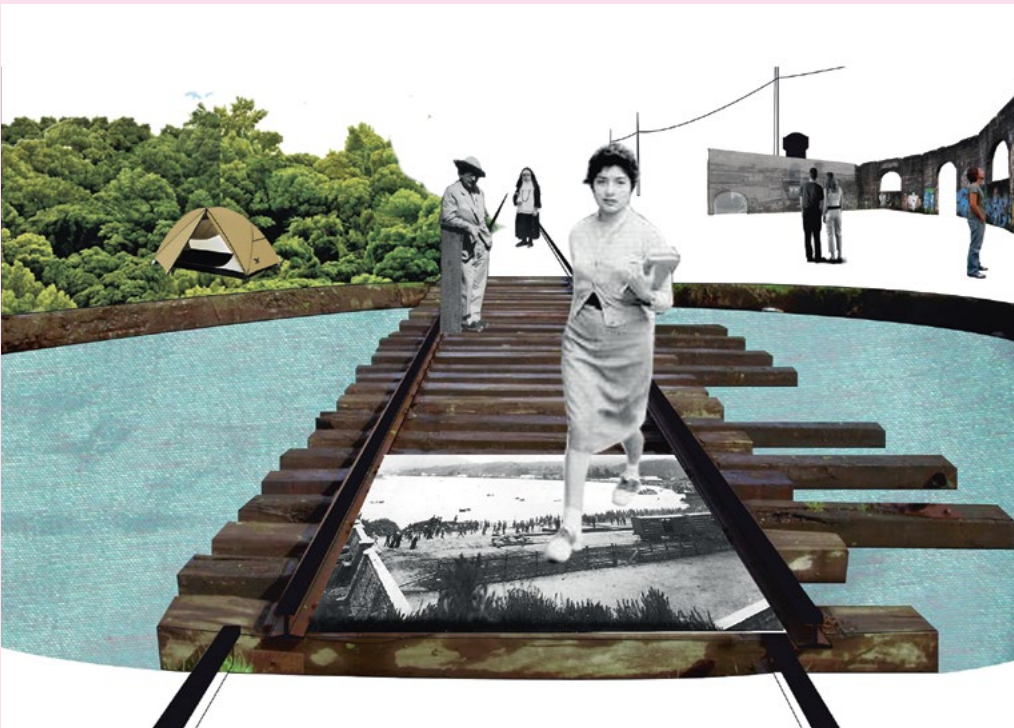
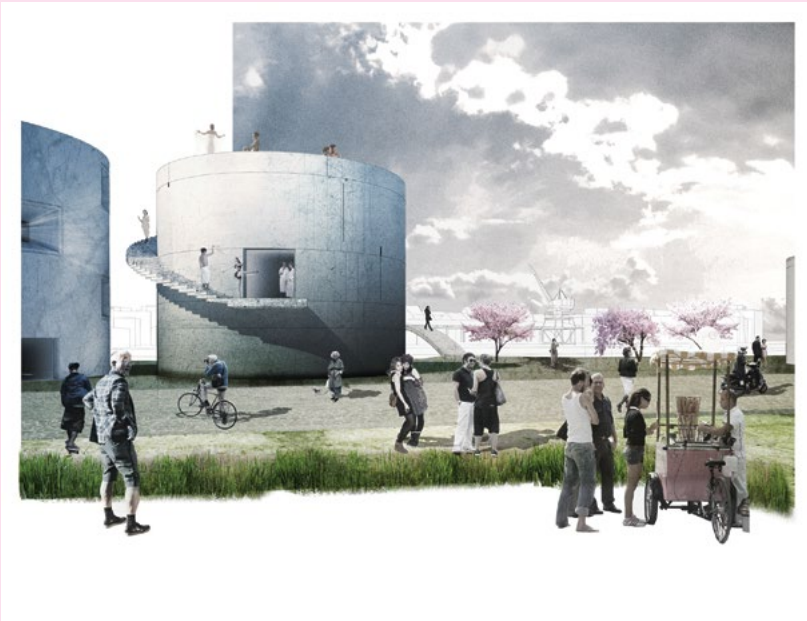
↑ Nicolai Schlapps, The Factory. Urban Sprout, 2013, Grüntuch-Ernst



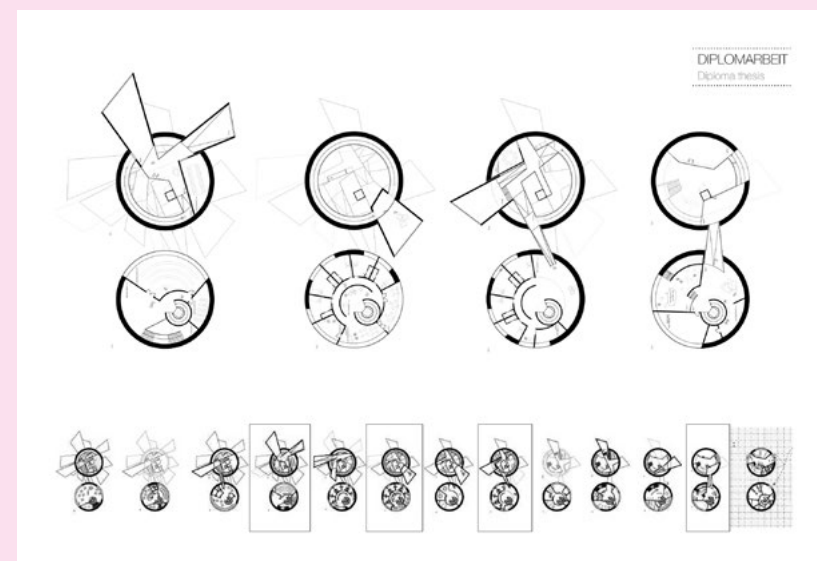
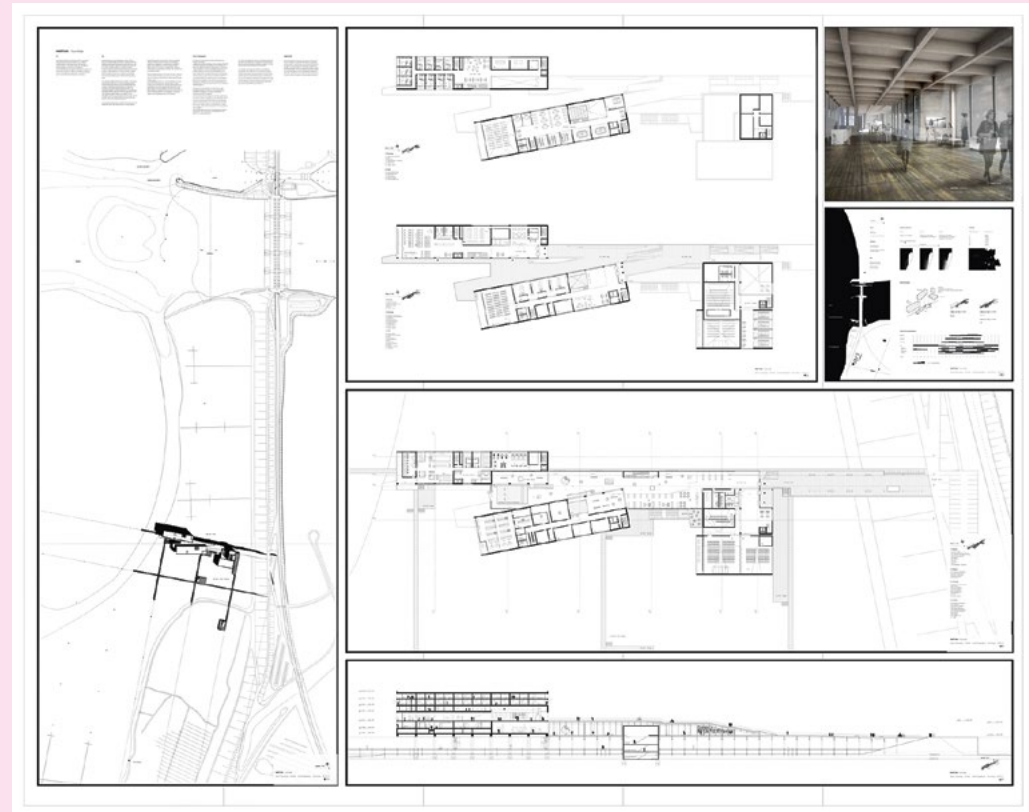
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- ↑ Jan Müller, Overbruggen van de Kanaal. A successive strategy for Anderlecht, 2013, Brederlau
- ↓ Anika Juliane Neubauer, Estación Valdivia, 2013, Kiefer



- ↑ Dirk Terfehr, Maritima. Coastal Forum, 2013, R. Schuster
- ↓ Merle Woköck, Museum of Oceanic Garbage Kopenhagen, 2013, Grüntuch-Ernst



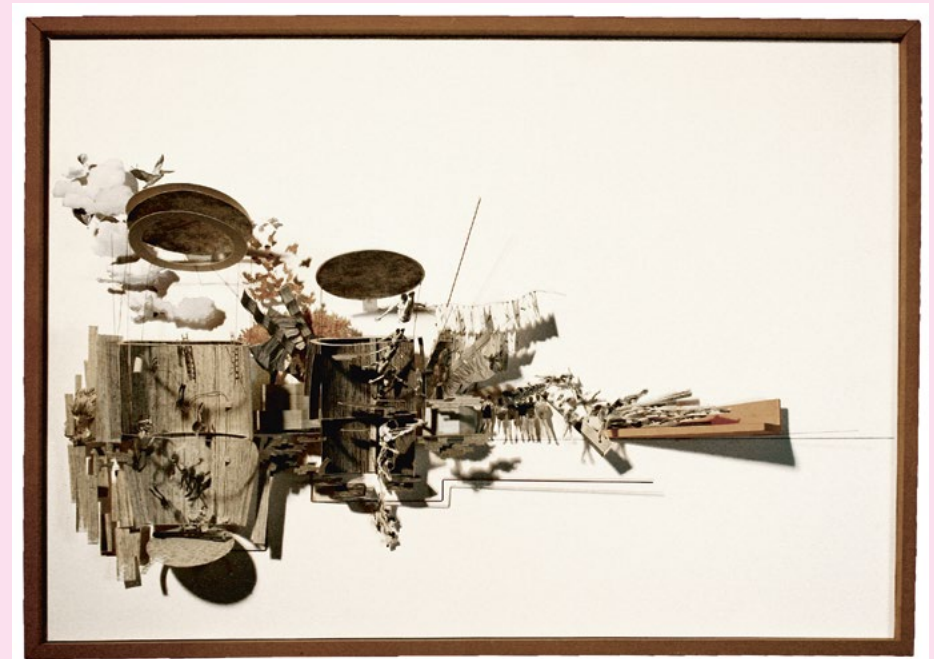
↑ Luis Alfredo Ziebold, archBS:
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↓ Lasse Babilas, Spreebad Lichten-
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↑ Jens Lehmann, Flussbad (river
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↓ Katharina Specht, Marschordnun-
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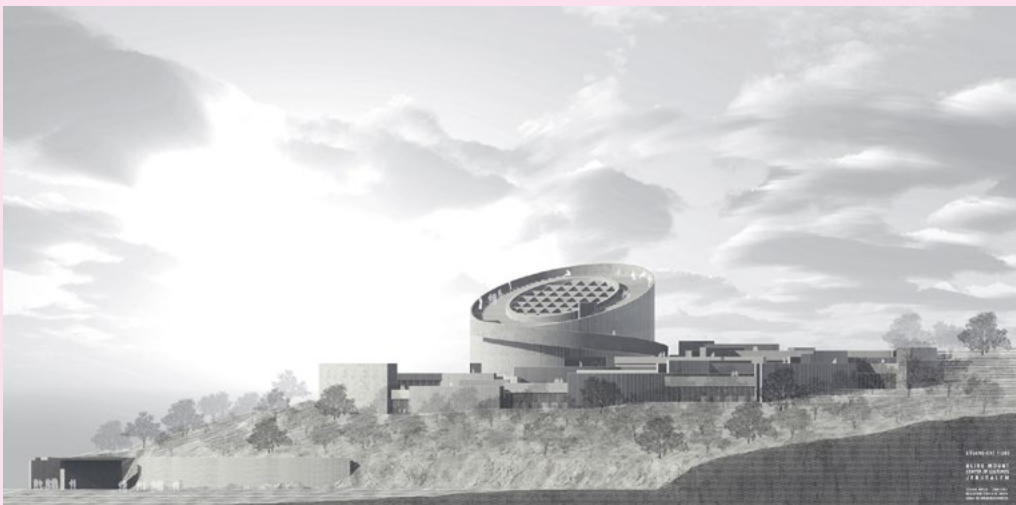
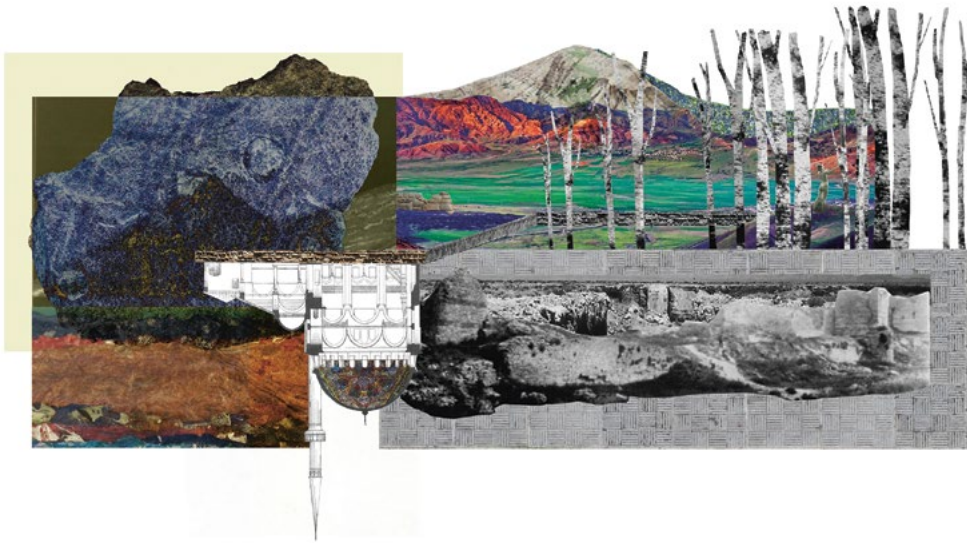
Bau der Straßen-Gräfe, Theaterplatz, Hamburg, 1938, Staatliche Hamburg



Mitbewerber Straße, Theaterplatz, Hamburg, 1938, Staatliche Hamburg

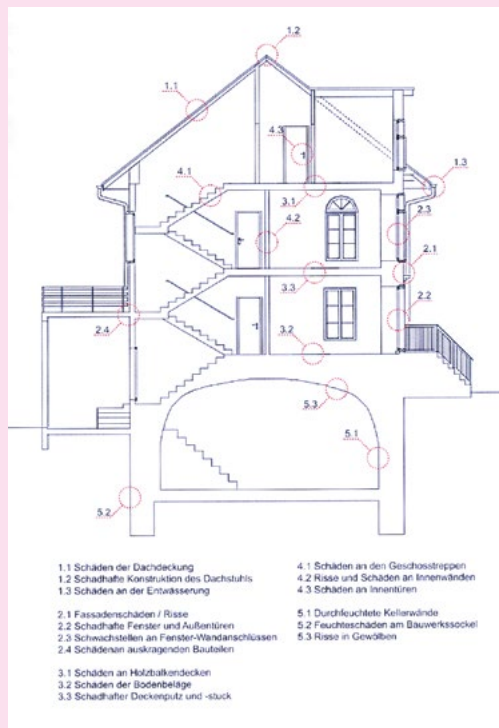


- ↑ Diana Bico, Agoraphobia Istanbul, 2014, Kiefer
- ↓ Luisa Held, Olive Mount – Center of Cultures Jerusalem, 2014, Grüntuch-Ernst



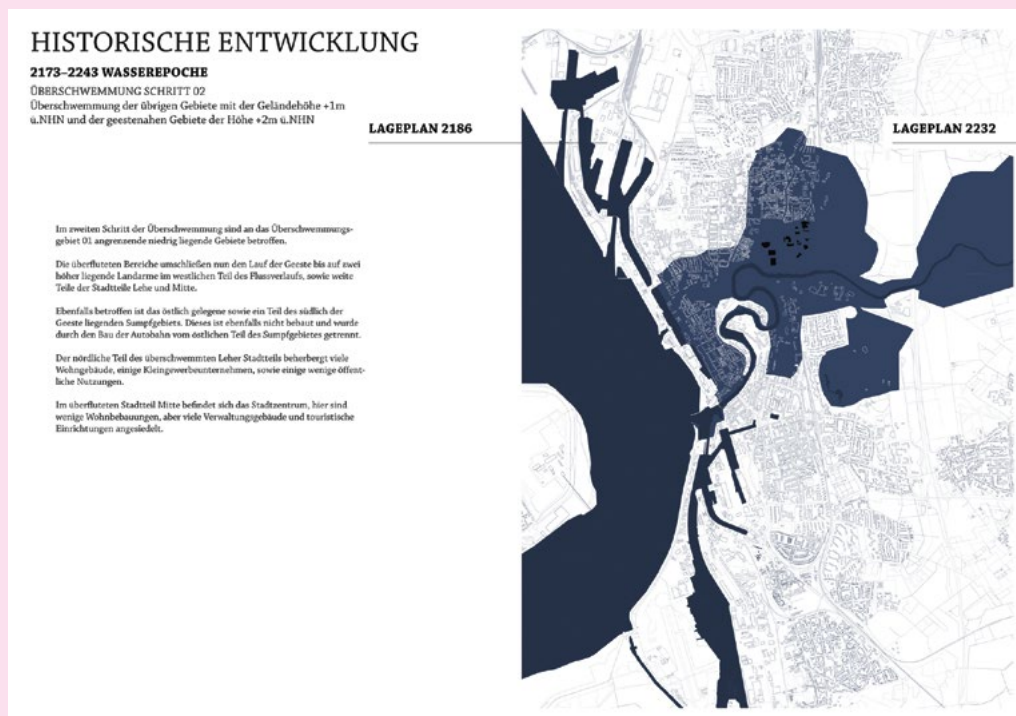
- ↑ Christoph Peetz, Welt.Raum. Flughafen – Spaceport Europe, 2014, Penkhues
- ↓ Steven Hahnemann, Optimization Potentials in Developing and Construction of Hospitals, 2014, Roth





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- ↓ Anne Kettenburg, Seestadt Bremerhaven (Bremerhaven – maritime city), 2014, Kiefer

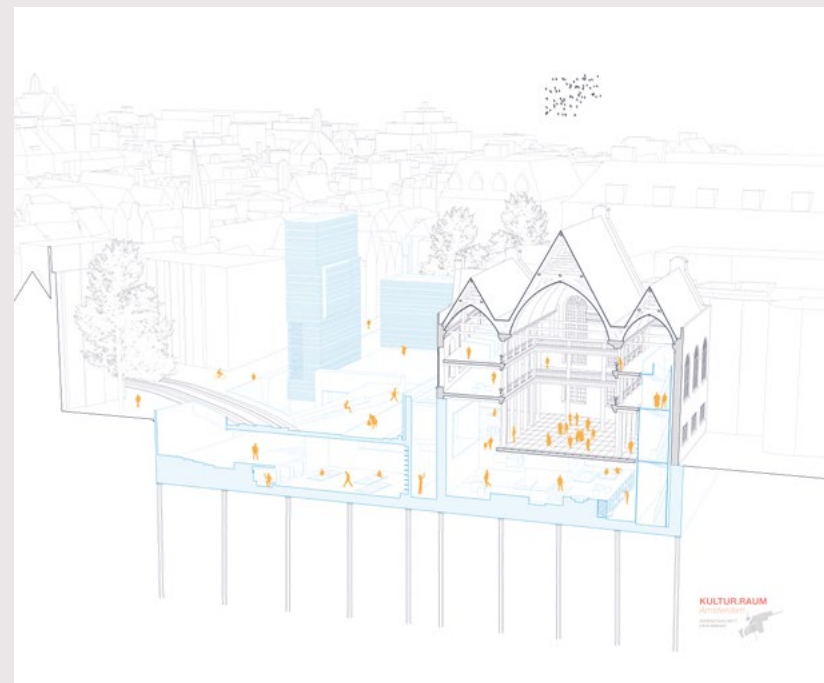
- ↑ Jonathan Schuster, La passerelle urbaine, 2014, Staab
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- ↓ Martin Franck, 5th Construction
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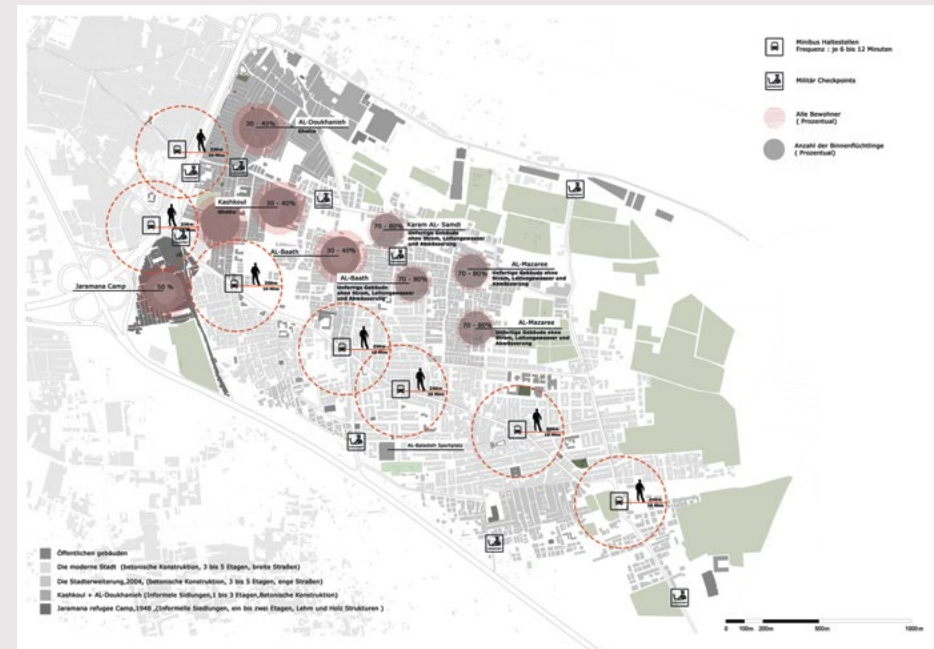
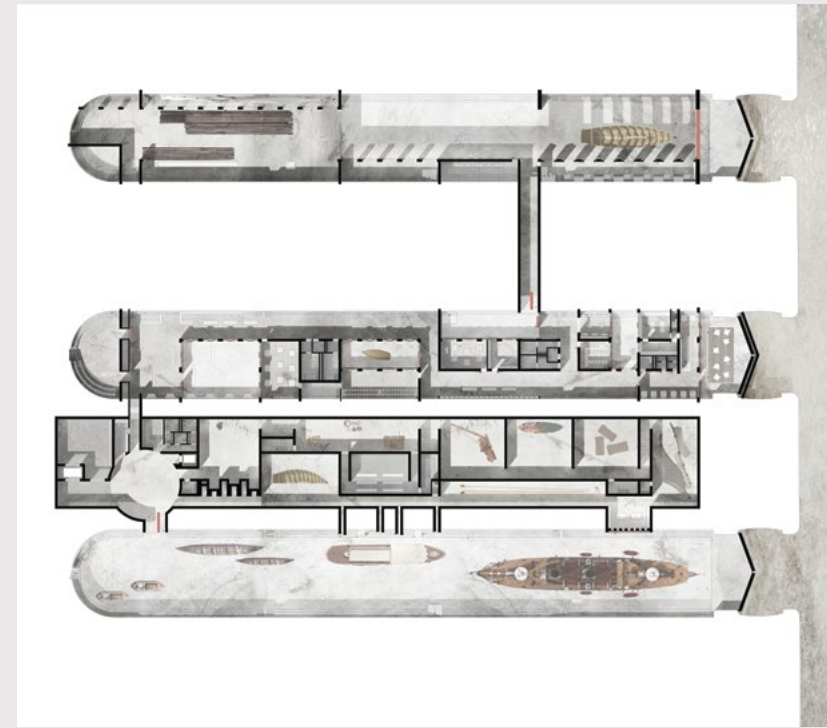
- ↑ Ulrike Knauer, Healing
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- ↓ Simona Schröder (now
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Amsterdam Centre for Cultural
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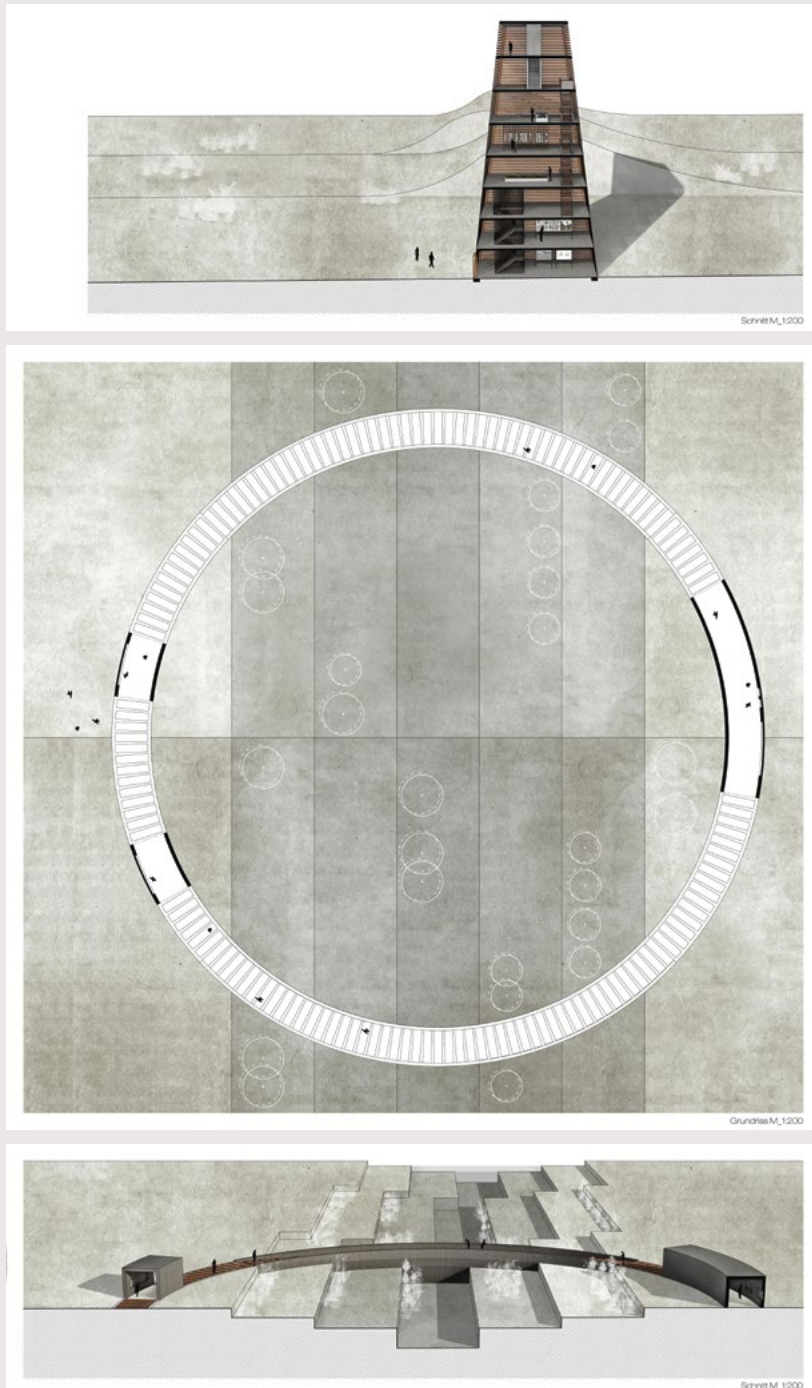
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- ↓ Robert-Christopher Tubbenthal, Zentralarchiv Helvetica: das Gedächtnis der Schweiz (Central Archive Helvetica: the memory of Switzerland), 2016, Staab



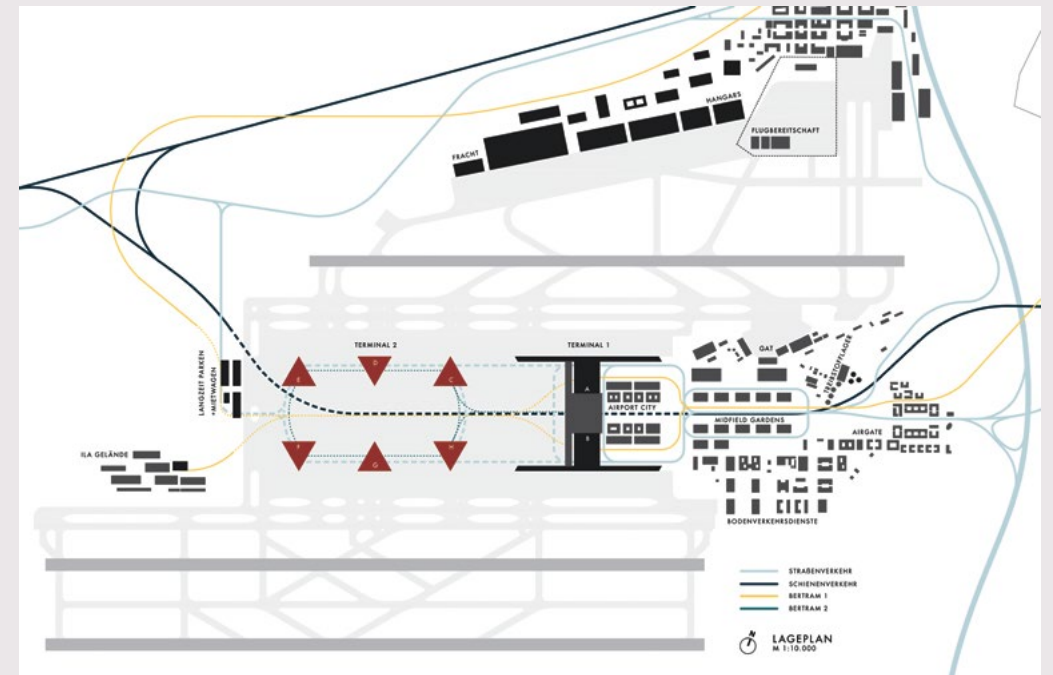
- ⬆ Nora Charlotte Delille, Zentrum für Schiffbau Antwerpen (shipbuilding center Antwerp), 2017, Staab
 ⬇ Maya Chalhoub, Badna N'ish (we want to live) – Jaramana / Damascus, 2017, Grüntuch-Ernst



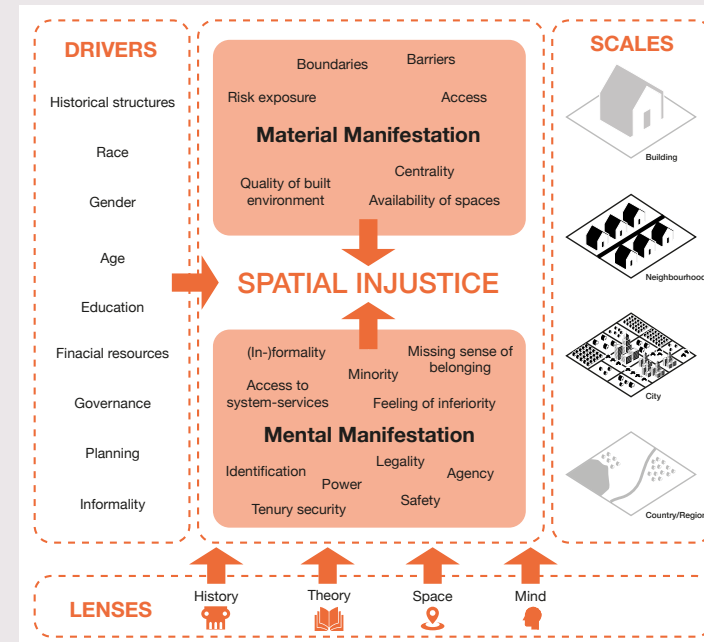
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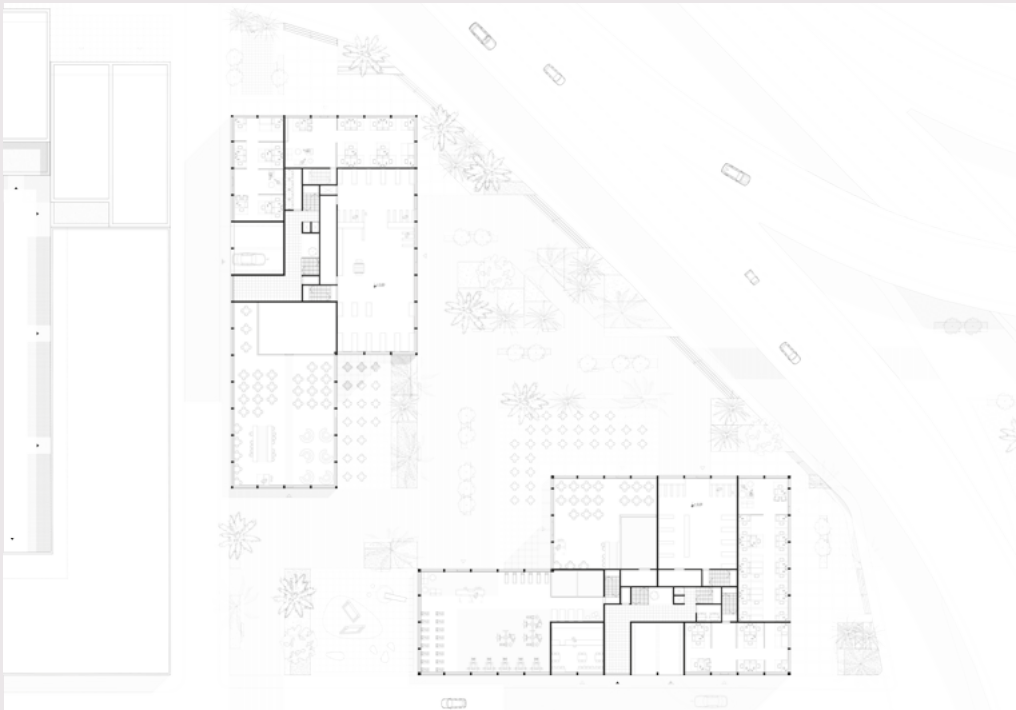
↑ Stefan Tuchen, Final Call: BER Terminal 2, 2018, Penkhues



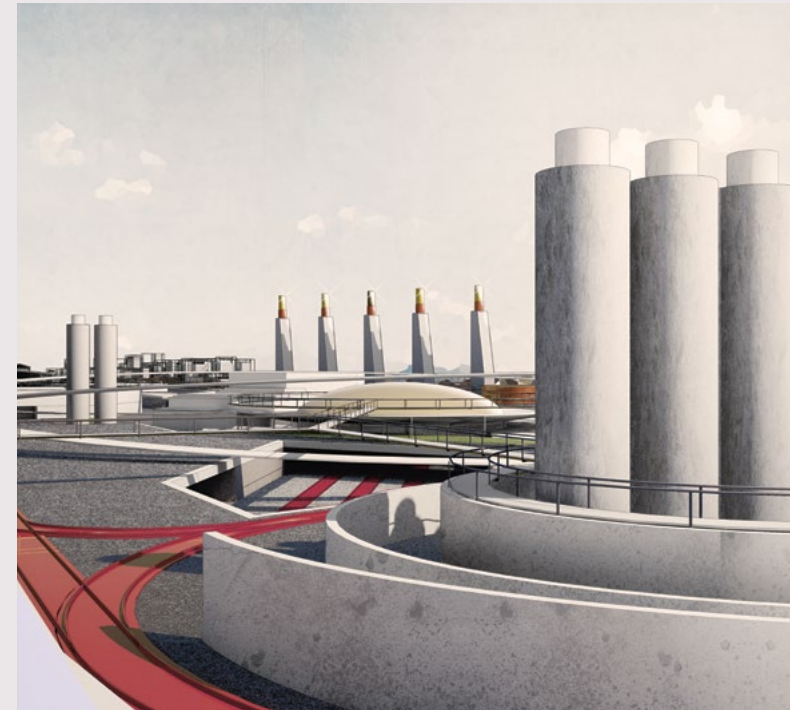
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- ↓ Victoria Strel, Minha Casa Minha Vida. Rethinking Social Housing in Brasil, 2019, Brederlau



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